ILLINOIS

February, 1950

Euthanasia

Immunization in Early Childhood

Medicolegal Problems of the Clinical Laboratory

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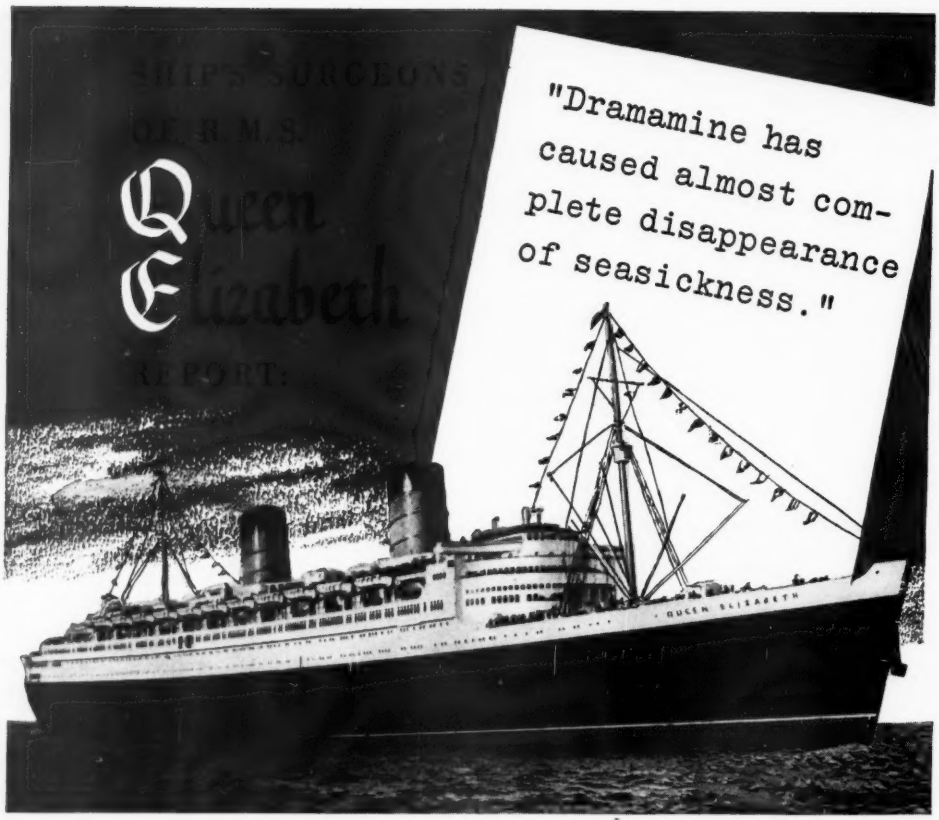
ANNUAL MEETING — Illinois State Medical Society
SPRINGFIELD, MAY 23, 24, 25



SUBSTANTIATING the findings of American investigators[1-3] on the effectiveness of Dramamine in the prevention and control of motion sickness, the ship's surgeons[4] of the world's largest ship report their findings in a letter to the British Medical Journal:

"We have been reserving it (Dramamine) for the cases in which hyoscine has been of little or no benefit. We have found that in almost every case Dramamine has caused almost complete disappearance of seasickness . . . . we find that 50 mg. twice daily will keep most people happy."

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Official Journal of the Illinois State Medical Society

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Vol. 97, No. 2 February, 1950

THE ANDY HALL ANNUAL MEETING

The 1950 Annual Meeting of the Illinois State Medical Society will be known as "The Andy Hall Annual Meeting."

For the first time in the history of the state society its annual session will be dedicated to and will be held with the principle in mind of honoring an individual member of this Society. At the regular January meeting of the Council upon the request of several members, it was unanimously voted to so designate our first downstate meeting since 1942.

Dr. Andy Hall has always been intensely interested in all problems pertaining to the care of his patients; he has advanced with the times; he has been an active member of organized medicine throughout the years; he has participated in all forms of postgraduate education; his office equipment is modern in every sense of the word; he has served his people and his nation at peace and at war; his work as the Director of the Department of Public Health of this State is still remembered; he has been Mayor of his town and active in good politics as every citizen of this nation should be; he has opposed the development of compulsory health insurance every step of the way. On January 8 Doctor Hall celebrated his 85th birthday, and the following day was in his office as usual seeing the many patients who have depended upon him for their medical needs over a long period of years. It seems most fitting that the 1950 annual meeting, his 60th year of practice, be designated as the Andy Hall Annual Meeting.

To Doctor Andy Hall has come all honors, local, state and national, yet from Doctor Hall comes the following sincere and modest statement of the gentleman he has always been:

"Please convey to the members of the Council my thanks and deep appreciation for the efforts in placing my name before the national committee and securing this unusual honor. It is not only an honor coming to me as a general practitioner, but it is an honor to thousands of general practitioners, many of whose names will never be enscrolled on any honor roll, but who are quietly, energetically and honestly performing the merciful and protective missions to suffering humanity — preventing disease, relieving pain and prolonging lives and adding much to the sum of human happiness."

Tuberculosis is preventable and eradicable. In the United States it causes one death every nine minutes. Illinois needs 3000 additional sanitarium beds.

THE ANTIHISTAMINIC DRUGS — FIVE YEARS OF EXPERIENCE

Samuel M. Feinberg, M.D.

With the exception of aspirin the most frequently used group of drugs at the moment of this writing are the antihistaminic compounds. First employed for the relief of allergic manifestations, then for many syndromes of unknown etiology and finally for the treatment of the common cold, their prominence has assumed proportions which makes stock-taking an obligation.

For some years the concept has prevailed that the major factor in the allergic reaction is the action of histamine on tissues as a result of its release arising from the union of antigen and antibody.

The report of Fourneau and Bovet[1] of the Pasteur Institute of Paris in 1933 that certain phenolic ethers had the property of counteracting histamine led to a more promising series of ethylenediamine compounds first reported by Marie Staub[2] of Paris in 1939. It was not, however, until 1942, when Halpern[3] of Paris described the action of Antergan that a compound was available which was found to be useful in man. This was soon superseded by the more active and less toxic Neoantergan.[4] It was not until early 1945 that Loew and his associates[5] announced the pharmacologic behavior of Benadryl and a few months later that Mayer and his coworkers[6] presented Pyribenzamine. In the intervening four or five years virtually thousands of compounds were examined experimentally by pharmaceutical houses, hundreds were tried in many laboratories including ours[7] and of these about fifteen or more reached the drug market. Among these may be mentioned Benadryl, Pyribenzamine, Neoantergan, Antistine, Phenergan, Neohetramine, Thenylene (Histadyl), Tagathen (Chlorothen), Diatrin, Decapryn, Pyrrolazote, Thephorin, Trimeton, Di-paralene (Perazil), Chlortrimeton. In addition to these drugs in tablets or capsules there were presented combinations of antihistamines with other antiallergic drugs, two antihistaminic drugs combined in one tablet, enteric coated tablets, tablets part of which were enteric coated and part sugar coated, syrups, elixirs, expectorant mixtures, eye drops, nose drops and sprays, and ointments and creams. Hundreds of published medical articles, claims and counterclaims by pharmaceutical houses, the ardent claims by detail men of superior advantages for their particular product, and the indiscriminate newspaper, radio and magazine publicity served perfectly to confuse not only the public but the medical profession as well.

Let us examine the major facts. In the laboratory one soon finds that all these compounds have virtually the same effects. Their major actions are local anesthesia, convulsions in toxic doses, inhibition of histamine shock in the guinea pig, dog and cat, prevention of histamine contraction of isolated muscle strips, prevention of asthma in the guinea pig from a histamine aerosol, and prevention of anaphylaxis. The clinical effects of the various antihistamines are also similar qualitatively[8]. They are effective against moderate symptoms of seasonal hay fever and less effective in perennial vasomotor rhinitis. In severe types of hay fever, in the nasal obstructive stage of the disease, in the latter part of the season, in severe seasons and in localities of high pollen content their effectiveness may be little or none. In asthma these drugs are useless in the majority of instances and certainly cannot compete with the old established palliative remedies such as epinephrine, ephedrine, aminophylline and iodides, and the newer remedies of isuprel and norisodrine inhalants and orthoxine. Desensitization with pollen extracts will prevent most of the 35 per cent of the asthmas which the hay fever sufferers normally experience. In the last three or four years as a result of high powered publicity the substitution of the antihistamines for the more efficient anti-asthmatic remedies and allergic management by physicians and patients has resulted in an actual deterioration of the management of asthma. It should be added that in some instances of allergic cough the antihistamines orally may be of benefit and in some cases of asthma aerosols of these drugs may be effective.[9]

The antihistamines are also useful in itching dermatoses. Urticaria, angineurotic edema, drug reactions, dermographism, pruritis anae and vulvae, "serum sickness" type of reaction from sera, penicillin, streptomycin, and sulfonamides

From the Dept. of Medicine, Northwestern University Medical School.

will usually be mitagated by antihistamine therapy. In all instances the effect is entirely symptomatic and the natural course and duration of the disease is not altered by this therapy. Constitutional effects from antigens may be prevented to a moderate extent only by the use of a dose of an antihistamine one hour before the injection. It cannot be emphasized too much that in case of an allergic emergency such as a severe reaction from pollen injection or an immediate serum reaction an antihistamine even by injection may be worthless. Only epinephrine may be life saving.

More recently the antihistamines have been advocated in the treatment of the common cold by Brewster[10], Gordon[11], Murray[12], and Arminio and Sweet[13]. The general claims of these writers has been to the effect that the prompt use of these drugs at the beginning of colds has resulted in a cure of the latter in one to three days. These reports have served as a basis for the marketing of many antihistamines alone or in combination on the doctor's prescription for the treatment of colds. Recently permission was also granted by the Food and Drug Administration to sell three such drugs under various trade names over-the-counter without the doctor's prescription. The doses marketed in these tablets is about one-third to one-half of the doses used in the experiments reported. The available evidence thus far for the efficacy of the antihistamines in colds is inconclusive on the following grounds: 1. The number of patients tested has been too small. 2. Patients with allergy or allergic syndromes have not been adequately excluded. 3. In many instances the patient's diagnosis of a cold was the basis of classification. 4. The immediate treatment of rhinitis is emphasized. Common experience tells one that a large percentage of episodes of sniffles, feeling of chilliness or sneezing do not materialize into colds. They are in essence vasomotor disturbances due to chilling, allergy and other phenomenon producing vasomotor effects. 5. Control series have not been adequate in the main. 6. Absolute diagnostic criteria of colds have not been utilized in the studies. The writer is impressed by the fact that among a group of chronic allergic patients having rhinitis, urticaria or atopic dermatitis, who have been taking full doses of antihistaminic drugs three or four times daily for many weeks the incidence of colds and their duration appeared to be no different from their previous experience or of the population in general. It is perfectly possible to obtain an atropin-like drying effect on the rhinorrhea or even to diminish some of the sneezing in the early stages, but the effect on the course of the cold is still in doubt.

Many limitations to the effectiveness of the antihistamines are present. They do not relieve all types of allergic manifestations, such as asthma, bacterial type of allergy and others. They are not effective due to the limitations of the amount of histamine which can be combated, by the amount of the antihistamine which can be tolerated and also to the fact that other than histamine effects may be present in the allergic reaction. They fail to affect all phenomena of an allergic manifestation, such as the edema in nasal turbinates. Their action is of short duration. Perhaps one of the most important limiting factors is the toxicity of this class of drugs. Virtually all are sedatives in moderate doses and cerebral excitants in high doses. The hazards of sedation, of lack of alertness in operating machinery, in automobile driving and in lack of mental concentration are obviously reflected in accidents and loss of efficiency. High doses may result in convulsions and death. Other side effects which may occur are cardiac and cerebral excitation, insomnia, dizziness, gastro-intestinal disturbances, marked dryness of the nose and throat and bladder disturbances. Blood dyscrasia has also been described and it is possible that remote toxic effects may also be something to contend with in the future.

Marked individual differences exist in the therapeutic and toxic responsiveness to the antihistamines in general and to specific compounds in particular. Some drugs although generally more potent than others are not necessarily the most effective for a particular person. Furthermore, a drug with a high sedative index may occasionally prove to be better tolerated than one with a lower index. It is necessary, then, to try frequently more than one drug to suit a particular individual. However, it is too confusing and inefficient for the average practitioner to become experienced with and to prescribe fifteen or more different antihistamines. It is the writer's recommendation that the average physician become familiar with a series of three antihistamines, one less potent and less sedative, one potent and highly sedative, and one potent and

moderately sedative. From the first group he could choose either Antistine, Neohetramine, Di-paralene and Thephorin. From the second group he could select either Pyribenzamine, Neoantergan, Thenylene, Tagathen, Diatrin, Pyrrolazote, Trimeton and Chlortrimeton. The third could be chosen from Benadryl, Decapryn and Phenergan. With a combination of three diversified drugs almost any situation responding to antihistamines could be met.

Over-the-counter sales of several antihistaminic drugs has created another hazard to public health. Replies to 180 questionnaires sent out by the writer to those who have had the largest clinical experience with the antihistamines — Fellows of the American Academy of Allergy —brought 153 returns. There was almost unanimous agreement[14] on the following: that therapeutic effects will be negligible with the doses recommended on labels; that over-the-counter drug articles do not command respect as regards potency and possible hazard; that careless handling of such drugs will probably result in fatalities; that such uncontrolled use of antihistamines may prove disastrous as driving hazards and that they may not be free from remote toxic effects; that such permission encourages self-diagnosis and self-treatment; and that these drugs should not be sold without prescription. At the meeting of the Council of Pharmacy and Chemistry of the American Medical Association on November, 1949, where the writer was invited to present this subject it was agreed that this self-medication constituted a hazard, that the evidence for the effectiveness of the antihistamines for colds was inconclusive and that the profession and public be appraised of these facts.

It is the function and duty of every physician and the family doctor in particular to serve as a protector of the health and life of those entrusted to his care. A word of advice, a timely warning here and there, may save a life.

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ACUTE PANCREATITIS

Acute Pancreatitis is difficult to diagnose clinically. In the past, most of the cases were recognized at operation and at autopsy; it is no wonder that the disease was of interest to the surgeons and pathologist and neglected by the internist. With the advent of newer pancreatic tests, the situation is changing and it is possible now to make the clinical diagnosis more frequently. As a result, many will be spared from unnecessary surgery in the future.

The symptoms resemble acute gallbladder and stomach pathology. There is a sudden onset of abdominal pain, most commonly epigastric or poorly localized in the upper abdomen. In more than one-half of the cases, the distress shifts and radiates to the back or upper right quadrant. It is noted occasionally in the left upper quadrant, the lower abdomen or the right shoulder. Vomiting is the rule.

Since the onset is often retroperitoneal, true abdominal rigidity usually is lacking. This is not a hard, fast rule, however, but in many instances, the findings serve to distinquish acute pancreatitis from perforated peptic ulcer. Since many of the victims also have gallbladder disease, the findings of acute cholecystitis and/or cholelithiasis usually co-exist and often dominate the picture. The individual usually is sicker, however, and many are in shock or near to it. In the past, shock was considered a prerequisite to the diagnosis but it is not the most common symptom and need not be present especially when acute pancreatic edema exists.

There are many pancreatic function tests including the serum amylase, serum lipase, secretin and the roentgen ray film tests. The serum amylase is the most specific and trustworthy but to be of value it must be done early in the course of the disease. In acute pancreatitis, there is a

significant rise during the first two or three days followed by a fall to normal. For the best results it should be done during the first twenty-four hours and if there is no increase in the serum amylase level, the chances are good that acute pancreatitis does not exist. Therefore, if we are to diagnose the condition more often, it is advisable in all cases of acute upper abdominal pain to draw blood for this test.

HEALTH EDUCATION THROUGH TELEVISION

For the past year the Illinois State Medical Society, through its Educational Committee, has presented a weekly television broadcast on various health subjects. This has been made possible through the cooperation of the "WGN-TV" Chicago station. Television is perhaps the newest medium for offering educational facts to the public, and it seems most fitting and proper that health educational programs are well received and desirable.

Television, combining the perception of both eye and ear upon the observer's brain, is more likely to be retained than the same material when presented orally, or when projected on the screen as a "still". With well executed dramatic technic carefully planned, it unquestionably adds materially to the enjoyment of the observer. The programs have been presented regularly throughout the past year on Wednesday afternoon. The writing of the script and dramatization has been done entirely by the Educational Committee.

Those participating in these broadcasts have been physicians and their patients; no professional talent has been used for any of the presentations. A physician who is not in private practice has been used as moderator for the programs, it seeming preferable to the committee than having the usual studio moderator. Physicians who have appeared on the programs have thoroughly enjoyed the experience, even though a considerable amount of time and effort have been necessary for their preparation to the best advantage.

The subjects presented have been varied, covering the various aspects of medical and surgical practice including many of the specialties. Perhaps the most outstanding and most dramatic presentation of the year was the showing of the fluoroscopic image of an actual patient's heart, this being only possible when a new "tube" had been perfected which was used in this presentation. This broadcast received wide attention through its unusual character and as it was the first presentation of such a feat through television.

Another spectacular show was one on anesthesia, in which a complete operating room was seen with all equipment, patient, anesthetists, nurses, etc. The items needed in case of anesthesia difficulties were presented. This seemed quite efficient in removing the mystery ordinarily present in the lay mind about anesthesia and its administration. The Educational Committee has been particularly careful in preparing the scripts for all presentations. No drug is mentioned by name, nor is there any reference to any agency dealing with the subject being presented.

In their regular "Health Talk" releases, the same principles are strictly followed, and at the present time, more than 350 newspapers in Illinois are using this material in their columns. Much credit for the success of these programs is due to the extensive personnel of "WGN-TV", who have invariably endeavored to do everything possible to improve the caliber of the show. The Illinois State Medical Society is the first state society to use television as a health education medium, and many letters are being received from various parts of the country commenting on this activity.

Unfortunately up to now, reception of television is largely limited to those areas near the larger urban centers, but it seems probable that within a relatively short time through the development of relay towers, rural people and those in smaller cities will be able to get clear reception. The Educational Committee hopes to continue this effort, and in the near future it is quite possible that an evening half hour will be substituted for the present 4:30 P.M. time of this broadcast.

By now it must be plain that the fight against tuberculosis is a social and economic movement as well as a disease problem. We now have enough information to be confident that an awakened awareness of the people is the chief tool for triumph. Francis J. Weber, M.D., Ohio Pub. Health, Feb., 1948.

CANCER DETECTION CLINIC IN THE SMALL HOSPITAL

E. B. Williams, M.D.

With the amount of publicity given the cancer question, more and more people are seeking examinations for cancer. Many of these people are in the vicinity of the smaller hospital and naturally would prefer to go to their home hospital for examinations. This is a convenience to the patient and further more saves him money in transportation and hotels.

Of what value then is a cancer detection clinic in a small hospital. By "small" I mean a general hospital under 200 beds. It is obvious that the amount of statistical material gathered would not be comparable to that gathered in a larger hospital or a large cancer center.

The Ravenswood Hospital of Chicago has a cancer detection clinic. The staff represents a fairly good cross section of the average small hospital staff. Most of the men are general practitioners. At our clinic there are three groups of patients — those sent by the main cancer detection center, those brought in by our own doctors for diagnosis and a few who know of the clinic and come in of their own accord.

The clinic meets each Friday. Patients from the main cancer center and those coming in of their own accord are seen by the resident or intern the previous Wednesday, at which time the history and clinical findings are written, a Papanicolaou smear is taken if indicated and instructions in regard to enemas are given if a proctoscopic examination is to be done in the clinic.

In the clinic former patients are presented for a recheck and reports on former patients are given. Patients brought in by our own staff are presented by their own doctors. The resident or intern presents the patient seen the previous Wednesday, giving the history and physical findings. A staff member is assigned to each resident or intern. If a gynecological patient, then a doctor on the gynecological staff is assigned; if a general surgical case then a staff member of the surgical staff is assigned. The same procedure is followed with eye, skin, nose and other cases.

If there is any question of malignancy all the usual tests are made — biopsy, Papanicolaou smear, proctoscopic examination, transillumination of breasts, etc.

Many patients fear they have cancer. These are examined as carefully as those with obvious pathological changes, as they are sometimes more mentally disturbed than those with an actual cancer. If they have no regular family physician they are asked to return for a restudy, otherwise we attempt to return them to their own physician and we report our findings to him.

After a patient is examined the entire clinic group discusses the diagnosis and each member gives his recommendation as to treatment. After the clinical meeting the patient is given the recommendation of the clinic group. In a small community hospital we feel that this is an approach to an out patient department for the teaching of residents and interns.

In summary then, we would say, the value of a cancer detection clinic in a small hospital is three fold. First and most important is the value to the patient. The clinic usually functions as a consultation for the patient; second, is its teaching value to the doctors, residents and interns and third its contribution to the stability and reputation of the hospital as a teaching institution.

Chairman, Tumor Clinic, Ravenswood Hospital, Chicago.

PLANS FOR MEETING PROGRESSING

Arrangements are now well under way for the 1950 Annual Meeting and this should be the best annual meeting from the standpoint of arrangements, scientific programs and in attendance. For the first time the large State Armory is available for meeting purposes, and all general assembly meetings, scientific and commercial exhibits will be displayed under one roof. There will be a few special meetings, and perhaps a few short section meetings held in buildings nearby.

Three days after the application forms were received by prospective commercial exhibitors, all available spaces were sold, a new high in the sale of exhibit booths.

Applications for scientific exhibits have been received by the Committee on Scientific Exhibits, and their booths likewise will all be occupied, as has been the custom in recent annual meetings. There will be the usual motion pictures display also in the Armory, and these will be shown

regularly on each of the three days of the meeting.

The first meeting of the House of Delegates will be held at 3:00 P.M., Tuesday, May 23rd, and the second meeting on Thursday, May 25th at 9:00 A.M. Both meetings of the House will be held in the Abraham Lincoln Ho'el ball room. Although the Springfield hotels have given ample assurance that there will be plenty of hotel rooms available, it is recommended that members expecting to attend the meeting make reservations as early as possible. This will help the hotel managements in determining actual needs. The headquarters hotel is the Abraham Lincoln, while the Leland and St. Nicholas, both modern hotels, are also a short distance from the Armory.

Members from all parts of the state should plan now to attend the big Andy Hall Annual Meeting, and secure hotel accommodations immediately in order that they may be assured that ample facilities are to be made available.

The following appointments have been made by Dr. Jacob E. Reisch, General Chairman of the Committee on Arrangements:

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THE LOAD IS ON MANY SHOULDERS

Talks against compulsory health insurance at the grass roots are one of the most important means of educating the American public. The Speakers' Bureau of the Committee on Medical Service and Public Relations has kept a record of all talks throughout the state which have been reported to that office during the educational campaign. Meetings have been scheduled and speakers furnished any group contacting the office. The list of men upon whom the committee can call to fill speaking engagements has grown. The more physicians willing to accept this responsibility and appear before groups composed of "from five to five hundred" the better the opportunity to reach any and all residents of Illinois.

The list given here is not complete. Many members of the profession as well as many members of the Woman's Auxiliary have made talks throughout the state that have not cleared through the Speakers' Bureau. One member of the Auxiliary in a small town appeared before some 35 or 40 groups during a six months period. We publish this list to show our membership that the efforts to educate the residents of Illinois are being carried on by many members of the profession. If YOU are willing to assume a portion of this responsibility, contact the Speakers' Bureau, Illinois State Medical Society, 185 North Wabash Avenue, Chicago 1, Illinois.

NAME	COUNTY	NUMBER OF SPEECHES
Aiken, Ralph C.	Southern (Cook)	6
Bartkowiak, Edmund T.	Stock Yards (Cook)	1
Blaine, Mrs. Walter C. (R.N.)	Douglas	3
Blodgett, Pliny R.	Southern (Cook)	12
Bondus, Thomas B.	South Chicago (Cook)	2
Bornemeier, Walter C.	Irving Park (Cook)	1
Bovik, Leslie E.	Lake	2
Braze, Alexander	Winnebago	1
Brosnan, John J.	South Chicago (Cook)	1
Butler, W. E.	Winnebago	3
Camp, Harold M.	Warren	7
Canfield, Bruce	Winnebago	2
Carney, Thomas B.	Henry	8
Coen, Walter W.	South Chicago (Cook)	2
Cole, Warren H.	North Side (Cook)	4
Coleman, Everett P.	Fulton	12
Compton, Mr. Don		1
Dewhirst, E. M.	Vermilion	3
Ellis, Mrs. R. B.	St. Clair	2
English, Harlan	Vermilion	8
Epsteen, Casper M.	South Chicago (Cook)	3
Fell, E. H.	Jackson Park (Cook)	1
Fillis, Ben E.	North Suburban (Cook)	1
Ford, W. K.	Winnebago	4
Fowler, Frank H.	Northwest (Cook)	1
Freeman, David B.	Rock Island	6
Friedell, Morris T.	Jackson Park (Cook)	4
Furey, Warren W.	South Chicago (Cook)	1
Gabby, S. L.	Kane	2
Goldberger, S. M.	Northwest (Cook)	2
Hardin, P.	Winnebago	3
Hawkins, Robert J.	West Side (Cook)	1
Hedge, Harry M.	North Suburban (Cook)	4
Heerens, R. E.	Winnebago	2
Hobart, Marcus H.	North Suburban (Cook)	4
Holman, D. O.	Winnebago	1
Hopkins, Percy E.	Englewood (Cook)	16
Hughes, L. J.	Kane	1
Hutton, James H.	Jackson Park (Cook)	2
Irons, Ernest	Jackson Park (Cook)	1
Ivy, Andrew C.	South Chicago (Cook)	1
Jones, Mr. Robert B.	La Salle	2
Kane, Jerry J.	St. Clair	1
Karr, John B.	Englewood (Cook)	2
Kearns, Jr., John E.	North Suburban (Cook)	1
Kidera, George J.	Aux Plaines (Cook)	14
Kirby, George E.	Bureau	16
Klontz, Charles E.	Winnebago	3
Krause, Charles D.	Englewood (Cook)	1
Lane, Charles O.	Franklin	1
Larkin, Leo C.	Aux Plaines (Cook)	1
Lee, Robert E.	Calumet (Cook)	3
Lynn, Robert B.	Madison	3
McCarthy, Elmer V.	South Chicago (Cook)	8
McCready, Robert B.	Calumet (Cook)	2
McDonnough, Mrs. James M.		1
McEnery, E. T.	West Side (Cook)	1
McGavran, Harry G.	Adams	2
Maguire, Rod	Fulton	11
Maloney, J. H.	Winnebago	2
Maloney, W. Robert	Pike	3
Mantz, Harry	Madison	1
Miller, Harold W.	North Shore (Cook)	1
Monroe, Clarence W.	Aux Plaines (Cook)	1

Moore, Gordon F.	Madison	3	Slobe, Frederick W.	Jackson Park (Cook)	1
Mullen, Timothy F.	La Salle	1	Sodaro, Joseph C.	Aux Plaines (Cook)	4
Mundt, G. Henry	Englewood (Cook)	1	Starcevich, Paul J.	South Chicago (Cook)	2
Murphy, Frank G.	South Chicago (Cook)	2	Steffen, C.	Winnebago	1
Mustell, Robert R.	South Side (Cook)	4	Stegen, Mr. Edward F.		10
Neal, Mr. John W.		7	Stevenson, Walter	Adams	8
Nicholas, Everett E.	Aux Plaines (Cook)	5	Stuart, Mr. Robert A.		1
Nicholson, F. M.	Northwest (Cook)	4	Sullivan, A. J.	Englewood (Cook)	3
O'Brien, George F.	South Chicago (Cook)	6	Sweeney, Leo P. A.	Calumet (Cook)	1
O'Neill, Joseph T.	La Salle	2	Szujewski, Henry A.	North Shore (Cook)	5
Palmer, W. H.	Winnebago	7	Thompson, Willard O.	North Side (Cook)	2
Parker, Martha	Vermilion	1	Timm, Harry E. L.	South Chicago (Cook)	11
Pope, Charles E.	North Suburban (Cook)	2	Traut, Eugene F.	Aux Plaines (Cook)	2
Pritikin, R. I.	Winnebago	3	Turner, E. C.	Carroll	4
Przygocki, Stanley F.	Northwest (Cook)	1	Turner, Horace E.	North Shore (Cook)	1
Richardson, Mr. William A.	Rutherford, New Jersey	1	Uhlenhop, Mr. Henry L.	La Salle	8
Saunders, H. Prather	North Shore (Cook)	1	Vaughn, Arkell M.	South Chicago (Cook)	2
Scatliff, H. Kenneth	North Shore (Cook)	2	Weir, H. F.	Winnebago	3
Shapiro, Fred	North Shore (Cook)	1	Wellman, Garland O.	Winnebago	1
Shriner, Mrs. Walter	Sangamon	7	Westerdahl, Arvid E.	Aux Plaines (Cook)	4
Slaughter, Wayne B.	North Shore (Cook)	1	White, C. Paul	Henry	4
			Wrork, D. H.	Winnebago	2

KIDNEY VISUALIZATION

In the diagnosis of renal lesions, one can use in addition to the plain films either intravenous or retrograde pyelography. While it is true that intravenous urography has been of distinct advantage in the diagnosis of lesions of the urinary tract, it should rarely be taken as the sole criterion in arriving at diagnoses of pathologic conditions. It is much more valuable in ruling out disease when the findings are normal than in establishing a diagnosis from apparently abnormal findings. We, therefore, prefer to have retrograde pyelograms whenever possible, and to correlate the appearance with the clinical data. This correlation is of paramount importance and no radiologist should be satisfied with seeing only the films. *Excerpt, The Roentgen Diagnosis of Lesions of the Urinary Tract, H. Dabney Kerr, M.D., professor of radiology, University of Iowa Medical College, Iowa City, Minnesota Medicine, November,* 1949.

You, too, can help through Your RED CROSS *Give Now!*

MEDICAL ECONOMICS

The Medical Economics Committee. Chauncey C. Maher, Chmn., Hubert L. Allen, Emmet B. Bay, Edwin F. Baker, Carroll Birch, Thomas C. Browning, Roland R. Cross, James Graham, George Halperin, Edwin S. Hamilton, Ford K. Hick, Edwin F. Hirsch, May McDonald Milligan, Marie Wessels, Walter M. Whitaker, Holland Williamson.

Euthanasia

Euthanasia, a word derived from the Greek roots *eu,* meaning well or easy, and *thanatos* meaning death is defined as easy death or means of causing one, or in a broader sense the act or practice of painlessly killing persons suffering from an incurable and distressing disease. The second meaning, I believe, defines the field of discussion. The actual process of dying according to the observation of doctors, the clergy and laity is not physically painful, but rather occurs during a stupor like a profound sleep. From the earliest times the primary objective in the practice of the healing arts, that is, medicine, has been the restoration of health to a diseased body. Why should one sick, desire to have his body restored to the full or at least adequately functioning level considered to be health? This poses a basic question in the philosophies of living which has engaged our thinking from the ancients to the present time. It stems from the primary principle that each of us has the fundamental wish to live and to achieve in the living his quota of happiness and satisfaction. No one denies that health is a requisite in the enjoyment of living. Albert Schweitzer, the philosopher, the theologian, the musician, and the physician clearly has stated this principle. The most immediate fact of man's consciousness is his assertion that he has a life which wills-to-live in the midst of life which also wills-to-live. It is with this will-to-live in the midst of the will-to-live of others, that man sees himself during every moment which he spends in meditation on himself and the world around him. If man bids his will-to-live into a will-not-to-live as is done in all pessimistic thought, he contradicts himself and raises something unnatural to the position of his philosophy of life. When man affirms his will-to-live, he acts naturally and honestly; he devotes himself to his life with reverence in order to raise it to its true value; he accepts as being good: to preserve life, to promote life, to raise life to the highest level capable of development. This basic reverence for life, and the ethic of its philosophy has everything that can be described as love, devotion and sympathy, whether in joy, suffering or effort. A man is ethical only when the life of his fellowmen is as sacred to him as is his own, and when he devotes himself helpfully to all life that needs help. Happiness is the end in life toward which men strive, said Aristotle. Happiness for each is found in the best possible performance of the function for which he is adapted, and necessary for this is a body in relatively good health. The famous oath of Hippocrates stated, among other principles, that "I (the physician) will give no deadly

drug to any, though it be asked of me, nor will I counsel such."

The application of euthanasia, the act or practice of painlessly killing persons suffering from an incurable and distressing disease, has at least two elements: (1) the determination of what constitutes an incurable and distressing disease and (2) the means and choice of causing death painlessly.

To whom do we turn, if not to the medical profession, for a decision in both of these? But even prior to this process of analysis, the one upon whom judgment is to be made, must have posed some social problem to the community, relatives or friends, in which groups, stress relations toward the unfortunate must have developed and which proposed euthanasia as a means for solution. Uselessness or a menace to society, nursing, food and shelter are large elements in this thinking, and probably the actual misery of the individual himself has minor or no consideration. No one, lay or medical, either through actual experience or by other channels is ignorant of chronic illnesses or disabilities caused by malformations, accidents, nervous disorders, cancer and many other conditions. Medical experts are called to examine, to diagnose and to restore these individuals to adequate health. For a large number no measures for the restoration of this health level are known at the time, but do we pronounce a death sentence on some one afflicted because of ignorance in Medical Circles? Criminal law specifies the death sentence as the maximum punishment possible for an offense by the individual himself. We are not certain in denying an individual his will-to-live that presently the reasons on which his judgment was made, no longer exist, because in the meantime new and improved methods of therapy for treating these patients have been developed. Within our memory many new drugs have been found effective in treating infectious diseases, some of which may cripple the one afflicted. Among these, just to mention a few, are the sulphonamides, the antibiotics such as penicillin, and the antimalarial compounds. Think, too, of the great progress that has been made in the rehabilitation of those crippled by poliomyelitis, by amputations, and even congenital defects. Not so many years ago the so-called "basket amputees" were regarded as hopeless. Today prosthesis, helped by the determination on the part of the cripple to relearn, gets functioning legs under them and provides useful arms so that they return to society as active members — farmers, lawyers, or participants in other vocations.

When society chooses to deny the will-to-live to some of its members for reasons of euthanasia it moves toward the revolting position into which certain members of the medical profession sank in Nazi controlled Europe. The initial objectives of an euthanasia program easily drift into other reasons for this practice and presently reasons purported to be for other public good are presented. "Doctors of Infamy" by Alexander Mitscherlich and Fred Mielke is the documented story in book form of the Nazi medical crimes by which the torture and killing of human beings under the guise of medical experimentation was carried out and without the consent of the individuals. Here again the basic purpose was to remove from society by death certain individuals or groups defined as undesirable. In the practice of inflicting this wrong on the individuals, grew an attitude callous beyond human belief on the part of those who executed this practice. A review of the various forms of experimentation used is not necessary, the important feature is to recognize that they were motivated by sinister, practical, ulterior political and personal purposes, arising in the administration of totalitarian rule.

The reaction to the exposure of these callous practices lead the World Medical Association, comprising thirty-nine national medical societies, including our own American Medical Association at its second General Assembly meeting in Geneva, Switzerland, September 1948 to endorse a modern version of the Hippocratic Oath. This is it:

> "Now being admitted to the profession of medicine, I solemnly pledge to consecrate my life to the service of humanity. I will give respect and gratitude to my deserving teachers. I will practice medicine with conscience and dignity. The health and life of my patient will be my first consideration. I will hold in confidence all that my patient confides in me.
>
> "I will maintain the honor and the noble traditions of the medical profession. My colleagues will be as my brothers. I will not permit consideration of race, religion, nationality, party politics or social standing to in-

tervene between my duty and my patient. I will maintain the utmost respect for human life from the time of its conception. Even under threat I will not use my knowledge contrary to the laws of humanity.

"These promises I make freely and upon my honor."

The Bureau of Legal Medicine and Legislation of the American Medical Association has given these statements on euthanasia:

"The American Medical Association has taken no official position with respect to this subject, nor has any state passed any legislation concerning it. Several bills have been proposed in England to legalize so-called mercy deaths but no affirmative action has been taken. There is no legal justification or excuse for the practice of euthanasia even though it might seem the kindest thing to do. A physician, of course, may prescribe measures for an incurable patient that will ease his suffering and render his last days comfortable and his death painless but it must be remembered that the judicious use of drugs under such circumstances prolongs life more often than it hastens death.

"Assuming, however, that an incurable and suffering patient, of sound mind and mature years, feeling that he is a burden on those charged with his care and recognizing the hopelessness of his case, expresses a wish to be killed, a different situation arises. Certainly the question of life or death in such a case could not safely be left to be settled between the patient and his physician, even with the advice and consent of the patient's family. The family has an interest in the matter to be decided and therefore is disqualified to judge as to what should be done. The patient himself, although mentally sound with respect to other matters, is in many cases, because of his pain and suffering, not capable of determining the best course to be pursued. And no physician who has a proper sense of responsibility would accept the burden of making a decision. The physician who deliberately causes death prematurely even for the purpose of relieving suffering, is guilty of manslaughter or murder.

"Whether the law should legalize the causing of premature death for any purpose other than as a punishment for crime is a matter for legislative determination. It involves not only the rights of the individual but the social, economic and political interests of the state. It involves not only the cases of persons of sound mind or mature years, who themselves ask to be killed, but the cases, often far more pitiable, of children who will go through life as idiots or imbeciles, and hopelessly insane persons, who are unable to speak for themselves. Legislation of this character would certainly call for some sort of an official board to pass on applications for permission to be killed and it would have to set up the proper machinery for killing, in order to avoid abuse.

"The medical profession can advise as to whether a person is or is not doomed to a life of idiocy or imbecility, or must go through life as a lunatic, or endure a life of suffering and pain with absolutely no hope of surcease, but it is hardly called on to pass on the inherent social, economic and political considerations and to judge the situation as a whole. It is unlikely that the average practitioner of medicine would willingly serve as an executioner under any law that might be set up, in those cases in which the law did not authorize the suffering patient to commit suicide and provide him with the means to do so."

"The quality of mercy is not strained, it blesseth him that gives and him that takes." The reverse is also true. Practices applied to individuals drift into practices on groups; callous attitudes toward persons lives lead to similar attitudes in a society. The arguments used by the proponents of euthanasia hold that a life has no value, is worthless, hopelessly crippled or sick and that the necessary care entails cost, expenditure of time and energy, physical and emotional stress without purpose. But after all, are real values measured only in coins? Are they not, rather an unselfish service to those in need about us? This principle of conduct follows through the individual into group relations, and reflects its greatest benefit in the giver. This, in my opinion, is the medical view on euthanasia.—E. F. H.

STATE DEPARTMENT OF PUBLIC HEALTH

Board of Public Health Advisors

On December 3, 1949, Governor Stevenson appointed a new Board of Public Health Advisors, with membership as follows:

Edward A. Piszczek, M.D., Chicago, Chairman, James H. Hutton, M.D., Chicago, E. P. Coleman, M.D., Canton, Lloyd H. Dodd, D.D.S., Decatur, Edison Dick, Chicago.

Illinois law requires that there be a Board of Public Health Advisors, composed of five persons.

In these times of concern about the intervention of government in various areas of health service a review of the history of Boards of Health may be helpful in understanding the place of the Board of Public Health Advisors, the Department of Public and their inter-relationship.

The first Boards of Health in this country date from the Massachusetts Bay Colony. These early Boards of Health, in the United States as well as in other countries, were born out of the terror of raging epidemics. The people, in their great fear, gave unlimited powers to these formally constituted Boards when they consigned to them full executive legislative and judicial functions. According to the record, these broad powers were kept within reason. This happy result may be attributed to the integrity of the members of the Boards or to the fact that time ran out before autocratic methods could be put into abusive practice. The limitation of time was due to the practice of having a Board of Health only during the peak of the epidemic.

Later in the history of Public Health, — during the 19th century and following — Boards of Health became continuous. The whole Board usually met three or four times a year and in the interim the secretary carried on in behalf of the Board. As the accumulation of knowledge revealed that prevention of epidemics was dependent upon the continuous application of control measures, legally constituted Departments of Health were developed as the executive arm of the Board. With the growth of Public Health Law, the Director of the Department of Public Health has been vested by the legislature with authority and responsibility for administration of specified activities which have a bearing on the lives and health of the people.

At this time, the Illinois Department of Public Health has operating programs in the following categories of service:

Environmental Sanitation
- Stream pollution control
- Water supply control
- Insect and rodent control

Pasteurized and grade A milk
Local Health Administration
Hotel and Lodging House Inspection
Communicable Disease Control
Venereal Disease Control
Tuberculosis Control
Public Health Education
Public Health Nursing
Maternal and Child Health
Mental Health
Public Health Dentistry
Cancer and Heart Disease Control
Hospital Construction and Services
Industrial Hygiene
Laboratories
Vital Statistics and Records

To carry out these programs the 66th General Assembly appropriated funds for the operating budget of which the following amounts are available for the fiscal year ending June 30, 1950:

Personal Services	$ 1,445,909
Contractual Services	172,939
Office Expenses:	
Postage	57,150
Other	11,060
Travel	167,539
Commodities	166,928
Stationery, Printing, Office Supplies	128,872
Equipment	63,751
Contingencies	4,500
Hospital and Medical Services	29,790
Medical Preparations for Free Distribution	165,879
Grants to Local Governments	731,250
Permanent Improvements	75,000
Expenses Ohio River Valley Commission	5,040
Total Direct Appropriations	3,225,607
State Officers' Salaries	18,500
Total	$ 3,244,107

TOTAL FUNDS ALLOTTED TO ILLINOIS FOR YEAR ENDING JUNE 30, 1950

FEDERAL FOR OPERATION:	
General Health	$ 597,280.00
V. D. Control (Chicago 150,000.)	427,200.00
V. D. Rapid Treatment	27,916.00
V. D. Casefinding Project No. 9313	6,998.75
T. B. Control	275,692.00
Cancer Control	180,828.00
Mental Health	177,500.00
Heart Disease Control	76,812.00
Hospital Survey and Planning	17,560.00
Water Pollution	26,078.00
Total Public Health Services	$ 1,813,864.75
Maternal and Child Health:	
Total Children's Bureau	336,071.06
TOTAL FEDERAL OPERATION	$ 2,149,935.81
TOTAL STATE OP. FIRST YEAR	3,244,107.00
TOTAL AVAILABLE FOR OPERATION FISCAL YEAR ENDING JUNE 30, 1950	$ 5,394,042.81
FEDERAL FUNDS FOR HOSPITAL CONSTRUCTION	$ 4,723,670.00

ADDITIONAL SPECIFIC APPROPRIATIONS

Senate Bill 360	$ 5,000,000.00	Payments for hospitalization of persons suffering from Tuberculosis.
Senate Bill 362	1,000,000.00	Repairs, Rehabilitation, Alterations and Expansion of Public T. B. Hospitals & Sanitoria.
Senate Bill 680	759,835.00	For completion of the construction of Mt. Vernon T. B. Hospital.
Senate Bill 680	225,000.00	For Furnishings and Equipment for Mt. Vernon T. B. Hospital.
Senate Bill 680	3,000,000.00	Grants-in-aid for construction of Public and Non-Profit Hospitals.
Senate Bill 655	4,850,000.00	Reappropriated from S. B. 662, 65th Biennium for completion of construction of State T. B. Hospital in Cook County.
Senate Bill 655	543,183.64	Reappropriated from S. B. 662, 65th Biennium for completion of construction of State T. B. Hospital at Mt. Vernon.

Thru Dept. of Finance upon Approval of the Health Dept.

Senate Bill 665	$ 4,035,275.55	Reappropriated from S. B. 662, 65th Biennium. Grant-in-aid for Construction of Public and Non-Profit Hospitals.

From the foregoing tables of activities and monies it may be possible to gain some idea of the responsibilities of the Department and the Board of Public Health Advisors. Impossible to list, at this time, are new activities which might properly be undertaken and old ones which, in the light of changing experience, might be dropped. Advice of the Board and/or authority of the legislature are preliminary to such change.

It is not planned that the State Health Department will continue to grow in size in order to render elementary public health services directly to local communities. Rather, it is hoped

that direct and basic public health service can soon be available at the grassroots in all areas of the State through full-time local health departments. At this time, 66% of the population of Illinois lives in areas with local public health service, but only 24% of the land area of the State is so covered. The professional and technical staff of the existing local health departments carry on basic public health service as required by statute, local ordinance and advice of the local board of health. Prorated amounts of the 731,250 item listed above as "Grants to Local Governments" are allotted each full-time local health department to carry on these services which formerly were carried on by personnel employed at the State level.

State-level personnel are available at all times for consultation, program planning and evaluation and for direct service on such highly specialized activities as Industrial Hygiene, Hospital Inspection and Licensure, operating Tuberculosis and Dental Survey Units, stream pollution involving extensive geo-political areas and other health problems that the local staff does not meet sufficiently often in their immediate jurisdiction to keep them proficient.

From time to time, special additional grants are made to local health departments to carry on extraordinary programs which are locally desired but for which local funds may not be readily available.

It is a function of the State Department and it is an important part of the 12 Point Program of the American Medical Association to encourage the development of adequate local health departments. These units, in each local area can bring to the people and the practicing physician the technical and professional staff and the know-how to carry on Community Sanitation, Maternal and Child Health, Public Health Nursing, Venereal Disease Control, Laboratory Service, Communicable Disease Control, Public Health Education and assistance in meeting the ever growing complex problem of chronic disease and care of the aged. The local Board of Health, (which by law must include in its membership at least two physicians, licensed in Illinois to practice medicine in all of its phases and at least one dentist licensed in Illinois) may be the channel through which the physicians in the area come to grips with social factors which affect health and which can best be conquered by organized community action.

VICTIMS OF COLON DISEASE ARE LIABLE TO CANCER

Cancer tends to occur as a complication of chronic ulceration in the colon, two doctors from the Mayo Clinic, Rochester, Minn., say.

Writing in the Dec. 3, Journal of the American Medical Association, Drs. William G. Sauer and J. Arnold Bargen point out that sufferers from this condition of the colon should have periodic medical examinations.

The doctors report 41 cases in which cancer occurred as a complication of the disease, known medically as chronic ulcerative colitis. The cancers occurred both among men and women, with no particular affinity for either sex, the doctors say.

Chronic ulcerative colitis generally had been present about 16 years before cancer was discovered in these patients, according to the article.

Patients with long-standing chronic ulcerative colitis should be checked periodically by the maintenance of a complete history and by physical examination, laboratory tests, and x-ray inspection of the colon, the doctors say. These measures are advisable to insure the earliest possible detection of malignant developments, they add.

CORRESPONDENCE

"YOUR MENTAL HOSPITALS" THE TYPES OF MENTALLY DEFECTIVE

The types of mental defectives admitted to the institutions for the mentally retarded can be roughly grouped into three divisions:

1.—*The idiot and imbecile*: The treatment for this group resolves itself mainly into custodial care supplemented by habit training. The patient is given training, insofar as his eating and elimination habits are concerned. He is taught to dress and undress himself, bathe and oral hygiene. It has been found that this class of patient is not scholastically educable, and all that one can hope for is that the patient may some day return to society and be as little burden as possible to his relatives, as far as taking care of his personal needs. Rarely does this type of patient ever become self sustaining economically.

2.—*The higher grade mental defective*: This type of patient is scholastically educable to a limited degree. The Department of Welfare is employing the newest teaching technique for the mentally retarded, known as audio-visual training. By this technique, and other activities, the patient learns to be self sustaining economically in unskilled and semi-skilled work. This technique came into being when it was recognized that the retarded person cannot profit from the regular school program. This technique utilizes all the senses with constant repetition. It was realized that a mentally retarded person must be approached from a different viewpoint than a normal one. A normal child can read about an object and form a proper concept, but the mentally retarded one must first be shown the object, demonstrate how it is used with movies and sound equipment, and then it is possible for him to read about this object and form a good concept. This is also coupled with field trips which demonstrate the objects which are being studied.

3.—*The defective delinquent*: Their personality characteristics are such as to make them delinquent, intractable, and demanding of closer supervision, direction and retention in more secure building units. It is in this area that a good psychological and phychiatric therapeutic program is helpful. This group includes the duller individuals, who at times find their way to the St. Charles Home for Boys and the Geneva Training School for Girls.

G. A. Wiltrakis, M.D.
Deputy Director

THE AUXILIARY'S INTEREST IN LEGISLATION

The most important problem on the minds of many of us as 1950 begins is the future of medical care in this country. The proposed legislation and the efforts to pass it make for little peace of mind on the part of those who are aware of its implications. The Challenge of the New Year belongs to members of physicians'

families more than to any group. It is up to us to keep the true situation before others and to be as unemotional about it as possible.

Auxiliary members are united in a program of public relations and legislation which is attempting to bring the issues to many people. Every doctor's wife has an equal stake in the fight whether she is a member of the organized group or not. It is not a fight to protect medical incomes but rather to keep this country from making the mistakes many countries before us have made. Compulsory health insurance under whatever name it is given is the same in every country and has never itself improved the health of a nation.

The obligation which rests on every doctor's wife is the same. We must all be so well informed on the subject that we can speak to the point wherever it is brought up, at bridge or in the grocery store. We must never be guilty of saying—"I don't know very much about it".

The effort needed to be well informed is not great. Read the pamphlets prepared by Whitaker and Baxter which describe the suggested Federal Program and evaluate it accordingly. Read whatever articles you can and sift them for merit. Listen to any discussion of the issue and try to determine which arguments appeal to you. Repeat them to your friends.

Every labor union, trade association, civic club, and other interest group has recognized the fact that the men in Washington and in Springfield appreciate the value of the vote and listen to the 'Voice from Back Home'. In the words of the Past President of the Sangamon County Medical Society 'whether we like it or not we are in politics'. Our responsibility begins therefore, whenever we choose a man for office. In this crucial year we must actively see that only those who have made a statement against regimentation are elected. If we make sure that every member of our own families register and vote, as well as evey member of our friends' families and every member of the patients' families, the number of effective votes for the right men will be tremendous. We cannot let the people who stay home elect the wrong ones again.

It has been said that a continuing flow of letters to Washington is necessary to persuade Congress that the people don't want Socialized Medicine. We must not be lulled to sleep by the talk that it is a dead issue. It is in moments of inertia that such pieces of legislation are passed and no one knows quite how. Encourage everyone to send cards to their Congressmen and to the President against the passage of any bill calling for Compulsory Health Insurance. Be informed about the provisions of each bill. The men in Washington will be glad to send you copies of specific bills if you request them.

Doctors' wives can help by establishing booths in hospitals with literature and the Doctor—Keep Politics out of this Picture exhibit. Patients and visitors can be given postcards to send. All the groups to which you belong can be approched for resolutions and the members given the literature. The Program Chairmen can be urged to have speakers on the subject. Being generally alert to opportunities will pay great dividends.

In any discussion of legislation we must meet the statement that as members of doctors' families we have vested interests. We do. We are as much interested in maintaining the democratic way of life as anyone else. We are not status-quo-ers by any means. We are as interested in improving the standard of living as anyone else. We are interested in extending medical care. We feel that insurance is essential *But* it must be Voluntary. We need make no apology for discussing the doctors' side of this tremendous problem. Since doctors seem to be first in a chain of regimentation if we don't actively lead the fight against it, who will?

Too few people have ever heard of the AMA's Twelve Point Program. Too few people know what the Illinois State Medical Society is doing to see that those areas which have no doctors are supplied with them, namely the scholarship plan and the assistance which secured physicians for eighteen out of thirty communities needing them this year. The State Society is doing much to improve the health of the people. The Education Committee provides speakers on health subjects, prepares Health Talk and radio and television programs. The Public Relations Bureau will supply material and speakers to present our point of view.

Since it is impossible to separate legislation and public relations we must remember that as representatives of the profession we are under closer scrutiny than ever before. We must not be guilty of making the issue a personal one as one doctor's wife is supposed to have done when she

said if it passed she 'wouldn't get a fur coat next year!' We must help people to see that organized medicine is made up of individual doctors, their own family doctors, about whom they have very special feelings, who truly put the patients first.

Every doctor's wife is an ex officio member of the AMA legislation committee. If this is to be grass roots program of offensive effort to defeat Socialized medicine, compulsory health insurance or whatever it is called, we must talk to everybody about voluntary health insurance, why a federalized program would mean poorer medical care for everyone, the damage done to a democratic nation by such political maneuvering, and what Medicine itself is doing. If you don't know about these things you had better be finding out before bitter experience teaches all of us. Ruth Shriner (Mrs. Walter) Springfield, Ill.

ENDOCRINOLOGY, DIABETES, FEATURED AT ASSEMBLY

A postgraduate assembly in endocrinology including diabetes, sponsored by The Association For The Study Of Internal Secretions and The American Diabetes Association, will be held in Miami Beach, Florida, April 3-8, 1950.

The faculty will consist of 20 prominent researchers and clinicians in the field of endocrinology and metabolic disorders, gathered from the United States and Canada.

The course will be a practical one of interest and value to the specialist and those in general practice. The program will consist of lectures, clinics and demonstrations.

A fee of $75 will be charged for the entire course and the attendance will be limited to 100. Registration will be in the order of checks received and will close on March 3, 1950. Should there be an insufficient number of applicants to fill the course, the registration fee will be refunded immediately in its full amount.

Application for approval of this course has been made to the Veterans Administration. Veterans should make formal application to their local agencies on the appropriate form (1905e or 1950) as furnished by the V. A.

Please forward application on your letterhead together with check payable to The Association for the Study of Internal Secretions, to Henry H. Turner, M.D., Secretary-Treasurer, 1200 North Walker Street, Oklahoma City 3, Oklahoma, before March 3, 1950. Further information and program will be furnished upon request.

Hotel reservations should be made directly with the Roney Plaza Hotel, Miami Beach, Florida, and the hotel advised that you are attending this Post-graduate Assembly.

NATIONAL GASTROENTEROLOGICAL ASSOCIATION CONTEST

The National Gastroenterological Association again takes pleasure in announcing its Annual Cash Award Contest for 1950. One hundred dollars and a Certificate of Merit will be given for the best unpublished contribution on Gastroenterology or allied subjects. Certificates will also be awarded those physicians whose contributions are deemed worthy.

Contestants residing in the United States must be members of the American Medical Association. Those residing in foreign countries must be members of a similar organization in their own country. The winning contribution will be selected by a board of impartial judges and the award is to be made at the Annual Convention Banquet of the National Gastroenterological Association in October of 1950.

Certificates awarded to other physicians will be mailed to them. The decision of the judges will be final. The Association reserves the exclusive right of publishing the winning contribution, and those receiving Certificates of Merit, in its Official Publication, The Review of Gastroenterology.

All entries for the 1950 prize should be limited to 5,000 words, be typewritten in English, prepared in manuscript form, submitted in five copies accompanied by an entry letter, and must be received not later than June 1, 1950. Entries should be addressed to the National Gastroenterological Association, 1819 Broadway, New York 23, N. Y.

AMERICAN BOARD OF OPHTHALMOLOGY SCHEDULES TESTS

Candidates for the certificate of the American Board of Ophthalmology are accepted for examination on the evidence of a written qualify-

ing test. These tests are held annually in various parts of the United States.

Applications are now being accepted for the 1951 written test. They will be considered in order of receipt until the quota is filled. Address inquiries to 56 Ivie Road, Cape Cottage, Maine.

PRACTICAL EXAMINATIONS FOR ACCEPTABLE CANDIDATES 1950

Boston	May 22-26
Chicago	Oct. 2-6
West Coast	January, 1951

CLINICS FOR CRIPPLED CHILDREN FOR MARCH

Doctor Herbert R. Kobes, director of the University of Illinois Division of Services for Crippled Children has released the February schedule of clinics for physically handicapped children. The Division will conduct 15 general clinics providing diagnostic orthopedic, pediatric, speech and hearing examinations along with medical social and nursing services. There will be 4 special clinics for children with rheumatic fever and 2 for cerebral palsied children.

During 1949 children made 8,466 visits to general clinics, 556 to rheumatic fever clinics and 226 to cerebral palsy clinics. Attendance at rheumatic fever and cerebral palsy clinics is limited to invitations only.

Local medical and health organizations, both public and private, cooperate with the Division in providing this clinic service to Illinois' thousands of physically handicapped children. The examining clinicians are selected from private physicians who are certified Board members. Any private physician may refer or bring to a convenient clinic those children for whom he may want examinations or may want to receive consultative services.

The March clinics are:

March 1—Joliet, Will Co. TB Sanitarium
March 1—Alton, Alton Memorial Hospital
March 1—Rock Island (Cerebral Palsy), St. Anthony's Hospital
March 2—Pittsfield, Illini Community Hospital
March 8—Hinsdale, Hinsdale Sanitarium
March 8—Metropolis, American Legion Home
March 9—Anna, American Legion Home
March 9—Elmhurst (Rheumatic Fever), Memorial Hospital of DuPage County
March 9—Springfield, St. John's Hospital
March 10—Chicago Heights (Rheumatic Fever), St. James Hospital
March 14—Peoria, St. Francis Hospital
March 14—E. St. Louis, St. Mary's Hospital
March 15—Sterling, Sterling Public Hospital
March 16—Rockford, St. Anthony's Hospital
March 21—Centralia, Franklin School
March 22—Evergreen Park, Little Company of Mary
March 22—Springfield (Cerebral Palsy), Memorial Hospital
March 23—Bloomington, St. Joseph's Hospital
March 24—Chicago Heights (Rheumatic Fever), St. James Hospital
March 28—Peoria, St. Francis Hospital
March 28—Effingham (Rheumatic Fever), Douglas Township Bldg.

RESIDENCY TRAINING REQUIREMENTS

The American Board of Obstetrics and Gynecology has not made nor is it contemplating any changes in its residency training requirements, despite rumors of an increase in training years. Eligibility requirements remain the same, namely, three years of acceptable formal training, followed by at least two years of post-training practice in the specialty.

Hospitals are inspected and approved for training jointly by the Council on Medical Education and Hospitals of the American Medical Association and this Board. Approvals are granted for training periods of one, two and three years depending on the available facilities and the findings of the survey inspections.

This Board has no objection to residency services being arranged by hospitals for periods longer than three years, unless this dilutes the candidate's clinical training opportunities too much during the first three years. However, the Board does not accept a fourth year, or more, of residency training as a substitute for any part of the required two years of post-training practice.

The importance of post-training practice in the specialty is emphasized as an opportunity for maturing of the candidate and for colleague appraisal of a man's ability when working on his own responsibility in his chosen community. The only exception to this ruling is in the case of men advancing from their training into full-time teaching positions. These men then must complete at least two years in such positions.

Copies of the Bulletin of this Board, outlining the above requirements in more detail, are available to hospital administrators or to candidates, upon application.

American Board of Obstetrics Zpb
Paul Titus, M.D., Secretary,
American Board of Obstetrics
and Gynecology,
1215 Highland Building,
Pittsburgh 6, Pennsylvania.

NEW FELLOWS OF INTERNATIONAL COLLEGE OF SURGEONS

The following named surgeons from Illinois were made Fellows and Associate Fellows in the United States Chapter, International College of Surgeons, at the Convocation ceremonies held during the Fourteenth Annual Assembly of the College in Atlantic City, New Jersey, November 7-11, 1949.

Certified Fellows:
Edgar T. Blair, M.D., Springfield
Nicholas J. Capos, M.D., Chicago
Edward M. Egan, M.D., Chicago
Kurt L. Eichelbaum, M.D., Chicago
Casper Morley Epsteen, M.D., Chicago
J. Major Greene, M.D., Chicago
William M. Hartman, M.D., Macomb
Allan Bonner Hirschtick, M.D., Chicago
Robert J. Hyslop, M.D., Freeport
Felix Jansey, M.D., Chicago
James Thomas Jenkins, M.D., Peoria
Henry P. Lattuada, M.D., Danville
Harold Laufman, M.D., Chicago
William Fred Lauten, M.D., Chicago
Robert Watson Lennon, M.D., Joliet
Elbert K. Lewis, M.D., Chicago
Josiah John Moore, M.D., Chicago
William H. Myers, M.D., Coal Valley
Anita E. Rapoport, M.D., Chicago
Theodore Morrison Shapira, M.D., Chicago
Harold E. Smith, M.D., Maywood
Samuel J. Turner, M.D., Chicago
George Z. Wickster, M.D., Oak Park
Joseph L. Wilkev, M.D., Chicago

Advanced to Rank of Certified Fellow:
Helen Louise Button, M.D., Chicago
James T. Case, M.D., Chicago
Henry Christiansen, M.D., Chicago
Maurice Hiam Cottle, M.D., Chicago
Franz Karl Fleischli, M.D., Springfield
Harry J. Fournier, M.D., Chicago
Frank Herman Fowler, M.D., Chicago
Morris T. Friedell, M.D., Chicago
Mace Gazda, M.D., Chicago
Lewis Albee Giffin, M.D., Alton
Samuel Lentine Governale, M.D., Chicago
William A. Hendricks, M.D., Chicago
Aaron Elias Kanter, M.D., Chicago
Paul J. Kullman, M.D., Chicago
Tadeusz Maryan Larkowski, M.D., Chicago
Ernest Oliver Larson, M.D., Chicago
Joseph Milton Levenson, M.D., Chicago
Ethelbert A. Lutton, M.D., Chicago
Rocco Anthony Masessa, M.D., Chicago
Louis D. Moorhead, M.D., Chicago
Richard Francis Murphy, M.D., Chicago
Harry A. Oberhelman, M.D., Chicago
Joseph M. A. Pape, M.D, Chicago
Norman Gittings Parry, M.D., Chicago
George J. Rukstinat, M.D., Chicago
Max S. Sadove, M.D., Chicago
Durand Smith, M.D., Chicago
Milan Michael Wasick, M.D., Chicago

Associates:
Samuel R. Barker, M.D., Chicago
Leonard Shelby Ceaser, M.D., Chicago
Frank Monarch Davis, M.D., Springfield
Martin A. Dolan, M.D., Chicago
Paul Mandel Egel, M.D., Chicago
Clarence A. Fleischli, M.D., Springfield
Leon T. Fruin, M.D., Normal
Max Manson Goldenberg, M.D., Belleville
John C. Havlik, M.D., Chicago
Gustav Anders Hemwall, M.D., Chicago
Julian Herson, M.D., Chicago
Apolonia Fermin Montezon, M.D., Chicago
Ralph Stoddard Sabine, M.D., Murphysboro
James E. Segraves, M.D., Chicago
Samuel Shapiro, M.D., Chicago
Thomas Slattery, M.D., Chicago
John R. Tambone, M.D., Woodstock
Joseph A. Teegarden, M.D., East Chicago
Sam C. Udell, M.D., Chicago
Morris L. Weinstein, M.D., Chicago

Advanced to Rank of Associate:
Julius Adler, M.D., Chicago
Ernest R. Blondis, M.D., Lemont
Rosario C. Drago, M.D., Chicago
Kyle C. Hawkins, M.D., Chicago
Charles F. Kramer, M.D., Chicago
Vincent F. Torczynski, M.D., Chicago

In addition, George F. Lull, M.D., and Bertha Van Hoosen, M.D., both of Chicago, were named Honorary Fellows in the International Chapters of the International College of Surgeons.

ORIGINAL ARTICLES

Immunization in Early Childhood

Louis W. Sauer, M.D. Ph.D.
Evanston

Simultaneous active immunization against diphtheria, tetanus and pertussis has become quite well established in recent years. The multiple antigen usually consists of diphtheria and tetanus toxoids mixed with pertussis vaccine, and is generally known as D.T.P. The addition of a retarding agent such as alum increases the efficiency. Alum-precipitated D.T.P. is a time-saver for physicians, parents and public health workers. For the infant it minimizes pain. The superiority of alum-precipitated D.T.P. is due to its prolonged retention in the body. Delayed absorption produces higher and more prolonged antibody levels. Systemic reactions are less likely to occur with slow absorbing than with fluid antigens. Earlier primary immunization can be achieved in more infants than could formerly be attained with fluid antigens. It is economical because with smaller doses the cost is less.

Assistant Professor of Pediatrics, Northwestern University Medical School, Chicago.

Read before the General Assembly Annual Meeting, Illinois State Medical Society, Chicago, May 17, 1949.

Optimum Age for Administration of D.T.P.— The American Public Health Association, The American Academy of Pediatrics and the Chicago Pediatric Society caution that immunization with multiple antigens should not be attempted during the earliest months of life. Because pertussis deaths and serious complications are most prevalent during the first twelve months of life, especially in infants in the lower economic group, earlier active immunization has been tried. When it is attempted before the sixth month of life, immunity tests should be performed about three months after the final dose to determine whether adequate immunity levels had been attained. Some young infants fail to utilize adequately the injected antigens. This is especially true when early immunization against diphtheria is attempted. Immune mothers transmit passive (transient) immunity to the offspring during the early months after birth; this antitoxin often exerts a neutralizing effect on injected toxoid. Waiting until the infant is six months old before administration of the first monthly dose of alum-precipitated

D.T.P. has several advantages. The diphtheria antitoxin response and the pertussis antibody level are better than when immunization is attempted earlier. Because three monthly doses of alum-precipitated D.T.P. often failed to yield protective levels* in infants injected before the sixth month of life, four monthly doses are recommended starting soon after the infant is 3 or 4 months old. Most infants in congested metropolitan areas and orphanages can now be protected by four monthly doses of alum-precipitated D.T.P. Advocates of early immunization stress that when immunization is delayed, the likelihood of contracting the disease is increased. If all of the other children in the household have had their basic immunization and booster doses, the chance that the nonimmune infant will develop the disease early is greatly reduced.

Reasons for Failure.—An occasional failure to confer immunity against pertussis may be due to several factors which can be controlled. These are (1) use of impotent strains of H. pertussis, (2) faulty preparation (i.e., use of distilled water instead of isotonic saline in suspending the H. pertussis cultures or weakening the vaccine by discarding the supernate, (3) loss of antigenicity by inadequate or frequent and prolonged interruption in refrigeration,** (4) insufficient dosage (During the first six months of life, 4 monthly doses are needed.), (5) improper administration technique (seepage), (6) exposure before adequate immunity has developed, (7) delay in booster doses, (8) diagnosis based on incomplete evidence (no cultures to differentiate pertussis from parapertussis, no white and differential blood counts to prove pertussis or to exclude influenza or other viral disease).

Prevention of Alum Cyst Formation.—Slow absorbing antigens (such as alum-precipitated D.T.P.) are best administered into alternate lateral gluteal areas, starting with the left proximal area. The most satisfactory needles are 25 gauge, ½ or ⅝ inch in length. Only distilled water should be used for rinsing syringes and needles. Sterilization is best attained by dry heat at 160C for 1 hour. If boiled in distilled water (at least 20 minutes), the needle and syringe should be free from moisture and cool. The skin is best cleansed with 70 per cent alcohol. Alum cysts have been eliminated almost completely by injecting deeply into the muscle mass, and terminating each dose with 0.1 cc. of air (Figure 1). Thus most of the antigen preparation is eliminated from the needle track. Prompt, gentle massage with sterile gauze over the injected area prevents seepage.

Figure 1. Alum precipitated D.T.P. is administered into alternate lateral gluteal areas; each dose (0.5 cc.) is terminated with 0.1 cc. air.

Prevention of Systemic Reaction.—Especially at the time of the first dose, each mother should be forewarned that a local or systemic reaction might occur. She should be told to offer water repeatedly, not force the next few feedings and, if the infant has fever, to avoid excessive covers and give one or more small doses of aspirin. To prevent untoward systemic reactions, injections should be omitted when there is a history of convulsions or when the infant is mentally retarded or defective. When there is general eczema, impetigo, furunculosis, or fever due to tonsillitis or other infection, injection should be postponed until recovery has taken place. Another reason for delay in antigen administration is that some premature and immature infants as well as those not thriving may develop

*A diphtheria antitoxin level of 0.2 unit/cc. or more is considered complete protection (0.004 units/cc. produces a negative Schick test). A tetanus antitoxin level of 0.1 unit/cc. is considered adequate to prevent tetanus. A serum agglutination level of 1:320 or better is accepted as ample for pertussis prevention.

**Since warm temperatures decrease antigenic potency, D.T.P. should be removed from refrigerator only for brief intervals when needed and returned promptly. Thermos food jars are satisfactory for transfer of D.T.P. to clinic or office; vials unused should be returned to refrigerator promptly. Date of expiration on each package should be checked before use.

transient anorexia if injected too early in life.

The occasional irreversible central nervous system reactions recently reported by Byers and Moll[2] and by Toomey[3] occurred mainly in infants who had had fluid antigen. In only one instance was a booster dose involved. Furthermore, during the early months of life it is frequently difficult to diagnose defects of the central nervous system due to congenital abnormalities or to birth trauma. If an untoward reaction occurs in a hypersensitive or allergic child, a dose of adrenalin should be administered promptly.

Booster Dose before Nursery School Attendance.—World War II proved the prophylactic value of tetanus toxoid. Three monthly doses of alum-precipitated D.T.P. (4 when started before 6 mos.) and follow-up testing of the serum proved that in most infants a basic protective level to tetanus antitoxin (0.1 unit/cc.) could be attained. Because in civil life tetanus infection may follow a minor injury, a booster dose is recommended at 2 to 3 years to insure an adequate antitoxin level before attendance in nursery school where minor accidents may occur. The use of alum-precipitated D.T.P. is preferred because thereby the immunity levels for diphtheria and pertussis are likewise stimulated.

Booster Dose before School Attendance.—As in the case of a booster dose administered before nursery school, a similar dose of (alum-precipitated) D.T.P. and a simultaneous smallpox revaccination are recommended at school age.

Booster Dose after Exposure of Previously Immunized Child.—Promptly after an injury which might produce tetanus infection, or after exposure to pertussis or to diphtheria, a booster dose of the specific antigen (fluid or alum-precipitated) should be administered to the previously immunized child. If more than two years have intervened between the last dose and the accident or exposure, use of fluid or alum-precipitated D.T.P. should stimulate the individual's resistance also against all three diseases.

Vaccination Against Smallpox.—The freshest possible vaccine should be used. It should be kept in the freezing compartment of an electric refrigerator or in a metal box in contact with ice. Smallpox vaccination should be performed a few months after completion of diphtheria, tetanus and pertussis immunization, preferably during the spring or autumn months. As a rule, primary smallpox vaccination should be delayed until primary immunization against diphtheria, tetanus and pertussis has been completed. For both sexes the preferred location for primary vaccination is the left upper arm at the deltoid insertion. The chief objection by mothers to give their consent for the arm vaccination in girls has been the fear of a conspicuous scar. Prerequisites for a small scar are (1) satisfactory cleansing of the site, (2) minimizing friction when cleansing, (3) implantation of the virus confined to a minute area, (4) multiple pressure technic without drawing blood, (5) excess of vaccine wiped away with sterile cotton or gauze after several minutes, (6) secondary infection prevented when the vaccination takes. The site should be kept dry for weeks.

TABLE 1. IMMUNIZATION SCHEDULE

Age	Antigen
6*mos.	D.T.P. (alum-pptd.)
7 mos.	D.T.P. (alum-pptd.)
8 mos.	D.T.P. (alum-pptd.)
9 to 12 mos.	Smallpox Vaccination
2 to 3 yrs. (Before nursery school)	D.T.P. (alum-pptd.) Booster Dose
5 to 6 yrs. (Before school)	D.T.P. (alum-pptd.) Booster Dose and Smallpox Revaccination
*If attempted earlier, start at 3 or 4 mos.	D.T.P. (alum-pptd.) 4 monthly doses
After known exposure of previously immunized	D.T.P. (fluid or alum-pptd.) Booster Dose (promptly)

Revaccination should be performed just above the scar of the primary vaccination at the time of the school booster dose of D.T.P. The latter may be administered deeply in the tissues of the right upper lateral arm. Cyst is less likely to follow if the needle is pointed distally and the site gently massaged.

Other Immunization Procedures.—Primary immunization against scarlet fever, typhoid fever, tick fever, etc., may be given when indicated. Booster doses or complete reimmunization in this group should be given when necessary.

SUMMARY

Simultaneous active immunization against diphtheria, tetanus and pertussis is effective. Three monthly doses of alum-precipitated D.T.P. are preferred. Best age for the initial dose is the sixth month of life. When earlier immunization is attempted, it should not be begun before the third or fourth month of life, and four monthly doses are recommended. A

booster dose of alum-precipitated D.T.P. is recommended before nursery school attendance, before school attendance, and after presumed exposure of the previously immunized. Smallpox vaccination should not be performed until completion of basic immunization against diphtheria, tetanus and pertussis. Immunizations against scarlet fever, typhoid fever and tick fever should be performed when indicated.

REFERENCES

1. Sauer, L.: Simultaneous Immunization against Diphtheria, Tetanus and Pertussis Quart. Bull. N.W.U.M.S. 22:281, 1948.
2. Byers, R., and Moll, F.: Encephalopathies following Prophylactic Pertussis Vaccine, Pediatrics 1:437, 1948.
3. Toomey, J.: Reactions to Pertussis Vaccine, J.A.M.A. 139: 449, 1949.

Medicolegal Problems of the Clinical Laboratory

Samuel A. Levinson, M.D.
Chicago

There is no statutory law licensing medical technologists in Illinois, Indiana, Michigan, and Wisconsin. Hence, the problem of the legal practice of medical technology should terminate with this introductory statement. There are, however, statutory laws in California and Alabama licensing clinical pathologic laboratories, either privately owned or institutional, and the United States Public Health Service. Medical technologists engaged in the pursuit of their specialties in these respective institutions also come under the surveillance of licensing boards. On the basis of the California and Alabama statutes, we have the opportunity of discussing these respective laws as they apply to our problem of clinical laboratories and medical technologists. We may ask two questions: (1) Is there a need for the Tri-State Hospital Assembly to consider a state licensing act in reference to the licensing of medical technologists? (2) What effect, if any, will such a law have on bureaucratic tendencies and political dictatorship in regard to licensing of medical technologists and clinical laboratories? These two questions we shall discuss in more detail later.

Hospital Laboratories, Research and Educational Hospitals, University of Illinois College of Medicine.

Presented before the 19th Annual Tri-State Hospital Assembly, Chicago, Illinois, May 3, 1949.

The Council on Medical Education and Hospitals of the American Medical Association, the American Society of Clinical Pathologists, and the College of American Pathologists have formulated a program of standards for the approval of clinical laboratories and medical technologists. The former, by stated inspections of the hospitals in this country, are interested in the operational standards of hospital laboratories. The privately owned or so-called commercial laboratories escape inspection by organized medical groups that are interested in maintaining a high standard for scientific medical work. Here is a flaw in our standardized investigation of clinical laboratories, in that emphasis is placed on hospital laboratories where the standard of work is, as a rule, superior to that in privately owned laboratories which are not subjected to examination. The American Society of Clinical Pathologists and the College of American Pathologists cooperate with the American Medical Association as far as the minimum requirements for the conduct of hospital laboratories are concerned. But the societies of pathologists do not independently make these inspections nor have they authority to recommend improvements whenever it is indicated. In Illinois, through the Department of Public Health, the State has approved laboratories and certified both hospital and privately owned laboratories for specific

diagnostic procedures. These include serology, blood typing, dark field examinations, pneumococcus typing, tubercle bacilli examinations, and gonorrheal smears. This, of course, is not a certification of the laboratories so much as it is a method of determining the diagnostic acumen of the medical technologists. The laboratory profits by the technologist's ability to make correct diagnostic tests. Furthermore, the teeth in the law concerning approval for the specific diagnostic tests as specified in the Illinois State Department of Health carries weight because of pre-marital tests that these laboratories are called upon to perform. In order to have this work accepted by the County Clerk issuing a marriage certificate, the pre-marital examinations must be performed in laboratories which have received approval by the State Health Department. Although this procedure as of this moment has merit, there are many flaws in the certification of the laboratories by the State Health Department, because certification of a laboratory may be interpreted by physicians and lay people as a certification of all types of work. This is not correct. Tests in biological chemistry, hematology, bacteriology, and parasitology, various agglutination tests and serologic examinations are but a few of the vitally important procedures that do not come under the examinations asked for by the State Health Department for certification. It is conceivable that some physicians may interpret state certification of laboratories, as in Illinois, to imply complete diagnostic services including histopathology.

Since there is no statutory law governing the conduct of a clinical laboratory or the work performed by the medical technologist, there is, however, a set of principles by which the pathologist and the medical technologist work in harmony in performing diagnostic procedures of benefit to the patient. These principles stem from the time of Hippocrates and they have been formulated into a code of ethics, moral in nature, which has profited us thus far. It involves an obligation to society resulting in the confidence of the population in reference to the work performed in the clinical laboratories. This has been made possible by the unselfishness and integrity of the medical technologist toward her duties to mankind. It behooves the physician to uphold the spirit of the moral and ethical code maintained by the pathologist and medical technologist and to support them in maintaining these high standards which they have resolved to carry on without statutory laws.

Pathologists, with the assistance of the American Society of Clinical Pathologists and allied organizations plus the efforts of the registered medical technologists, have made valiant efforts to maintain these high standards. The medical profession should likewise continue to render service to their patients by insisting that their clinical laboratory diagnostic problems be performed by registered medical technologists. In this manner they will continue to perpetuate the ideals of the medical technologist. For example: in the preamble of the Code of Ethics of the Registry of Medical Technologists, there is this paragraph, "I am aware that since the physician relies upon my work in the diagnosis and treatment of disease, even a trivial error may affect seriously the health or even the life of a patient. Every procedure, therefore, must be carried out with thoughtfulness and accuracy. Knowing these things I recognize that my integrity and that of my profession must be pledged to the absolute reliability of my work. I realize that the knowledge obtained concerning individuals in the course of my work must be treated as confidential and since the physician has the ultimate responsibility in diagnosis and treatment, my results must be made known only to him or those designated by him." There is no such sentence or sentences as just quoted from the Code of Ethics of the Medical Technologists that appears in any law licensing medical technologists or clinical laboratories. These statements in the Code of Ethics are binding between the pathologists and the medical technologists in relationship to the patient and the physician.

The question may now be asked, what legal rights, if any, does the medical technologist have? The medical technologist in a hospital is responsible to the pathologist, but is an employee for the pathologist or the hospital depending upon who employs her. For a physician to practice medicine he must be licensed by the state. A nurse also obtains a license to practice her specialty. Licenses are issued for beauty parlor operators, barbers and various other sundry specialties. But the medical technologist performs precision work that requires years of preparation and continued study under the guid-

ance of a pathologist without control of licensing boards.

There are times when the charge of malpractice can be made against a pathologist because of some work performed by the medical technologist under his direction. Malpractice in pathology, as in other branches of medical sciences, occurs when a practitioner is guilty of dereliction in skill, knowledge, care, or judgment incident to the discharge of his professional duties (Moritz). For a court to charge such a dereliction as malpractice, it must in the opinion of other pathologists, fall below the "average practice". If it is demonstrated by a preponderance of evidence that an injury has been sustained as a direct result or failure on the part of the pathologist to discharge his professional responsibility at an average level, it is very probable that the court will find in favor of the claimant. If a pathologist through dereliction on his part makes a mistake in laboratory diagnosis and the attending physician administers improper treatment to the patient, relying on the diagnosis of the pathologist, the pathologist and not the physician becomes legally liable for the injury sustained by the patient. However, it is not relatively easy to make a categorical statement regarding the extent to which a pathologist might be responsible for the mistakes or negligence of his technicians. Moritz is of the opinion that it should be held that a pathologist is responsible for the actions of those working under his supervision. If this is correct, the pathologist is in an exceedingly vulnerable position in regards to malpractice. If he were sued because of a mistake made by his Wassermann technician, he would need to show that he conducted his laboratory and supervised the work of his technicians with an average degree of skill, knowledge, care, and judgment. If he had taken what other pathologists would agree were average precautions to see that his Wassermann technician did not make mistakes, he would probably be in a defensible position. This reasoning can be applied to every phase of laboratory diagnostic procedures. Skill and precision is required to operate a blood bank and an error by the medical technologist in the typing, cross-matching, and the transfusion of incompatible blood would place the pathologist and the medical technologist in a very questionable defensible position. These are but a few examples to show the cooperative teamwork which must exist between the pathologist and the medical technologist in performing skillful clinical laboratory diagnostic procedures.

Thus far the medical technologist has rendered service to the physician and patient without statutory laws. The medical profession should excercise every method possible to protect the quality of the work and the obligations of the registered medical technologist to continue to maintain the high standards of clinical laboratory diagnostic procedures for the benefit of mankind.

Let us now examine the questions formulated at the beginning of this discussion concerning the licensing of clinical laboratories and medical technologists. In the State of Illinois, as in the other states comprising the Tri-State Hospital Assembly, there are laboratories recognized by the American Medical Association and the American Society of Clinical Pathologists as training centers for medical technologists. These institutions have met a rigid standard of investigation. The pathologists and teachers in these institutions are qualified, the equipment for performing work is of a high standard, the prospective candidates for medical technologists are selected because they have a minimum background of training beyond the high school level, at least one year is spent in the laboratory under proper supervision, and finally these schools are operated for the sole purpose of scientific training without any remuneration except a nominal course fee. These institutions are not operated for profit and as such voluntarily devote their efforts for the benefit of humanity. Contrast this with the numerous privately owned commercial laboratories who profess to give courses in training in medical technology and make further claim that their graduates are comparable in training and experience with those from schools that are properly staffed and subjected to repeated investigation by governing bodies. Some of these commercial laboratory schools accept high school students and the training they receive is inadequate and poor, the tuition is excessive, and after three to six or nine months' training, depending on the students' exchequer, they are foisted on the public as medical technicians. Not only do they offer competition to properly trained medical technologists, but they believe they are competent and are to be trusted

with material submitted for diagnostic procedures. If we should ever have a statutory law licensing laboratories in the state, these mushroom laboratories may be given certification not only to operate as clinical diagnostic laboratories but for the training of medical technologists. Thus, all of the efforts in the past years to maintain a high level of medical education, with particular efforts to the training of medical technologists, would be lost by virtue of state licensing of all laboratories even though they may have a minimum requirement for operation.

There are two states, Alabama and California, that have statutory laws governing the registration of medical technicians and clinical laboratories. In Alabama the bill was introduced in 1936 and approved in 1937, enacting a law for the state registration of medical technicians. In this state, the law prescribes, "That a medical technician, within the meaning of this Act, is a person who is engaged in the practice of standardized or experimental technical procedures, the results of which are interpreted by the physician in the diagnosis of disease." The law further states that "the minimum educational prerequisites be one year of college, scholastic and laboratory work, with courses in chemistry, bacteriology and biology, and that the applicant has satisfactorily completed a full twelve months instruction in an approved training school for medical technicians, and upon a satisfactory completion of the training, and the examination of the applicant in the various departments of laboratory methods has been successful, the state will issue a certificate of registry authorizing him or her to practice the profession of medical technician in this state as a registered medical technician." The State of Alabama recognizes all medical technicians registered as such with the Registry of the American Society of Clinical Pathologists prior to October 1938 and will issue a certificate of certification to these individuals without examination. Governor's No. 153, Laws of 1936, of the State of Alabama states further, "The Board shall have the power to annul and revoke any certificate of registration for incompetency, intemperance, immorality, or unprofessional conduct on the part of the holder of such certificate, after a full and fair investigation of the charges preferred." There are provisions made in this Act that no other person shall assume the title "Registered Medical Technician" or any other letter or figure to indicate he or she is a registered medical technician. It shall be unlawful to practice in Alabama as a registered medical technician without a certificate currently in force. Then agan the law provides that any person practicing as a medical technician except under the immediate direction of a qualified doctor of medicine, or who violates any of the provisions of this Act, or who shall willfully make any false reports to the Board in applying for a certificate, shall be guilty of a misdemeanor and upon conviction thereof shall be fined not less than ten dollars and not more than five hundred dollars.

Up to this point one may direct attention to the emphasis placed on the qualifications of the medical technologist as far as training and ability to perform her duties are concerned. One may ask, is there an equal control of the schools training medical technologists. According to the Alabama law (Section 16), "Any training school for medical technicians which is listed and approved by the Council on Medical Education and Hospitals of the American Medical Association, shall be deemed an approved training school within the meaning thereof: If not so listed and approved the question of whether such training school has the standing and qualifications to meet the requirements of an approved training school within the meaning of this Act, shall be determined by the State Board of Censors of the Medical Association of the State of Alabama. The Board of Censors shall not approve for the purpose of this Act any training school unless the same is an institution laboratory (hospital, school, public health laboratory, biological laboratory, clinical laboratory) whose laboratory procedures are under the guidance of a qualified director and which maintains adequate equipment and space as well as a variety of specimens which must number not less than 1500 per month. Provided, however, that said Board of Censors may approve institution laboratories which provide less than 1500 specimens per month by requiring of applicants who have received the training thereat a proportionately longer period of training. In the case of hospital or clinical laboratory, the director of the laboratory must be a physician-pathologist; in the case of Board of Health Laboratories the director must hold a Ph.D., or a doctor of medicine degree." There is a statement in Sec-

tion 17 which is of interest, namely, that "the secretary-treasurer shall receive a salary commensurate with the duties performed, to be fixed by the Board. The members of the Board shall be reimbursed for all expenses incurred in attending meetings of the Board and that all fees collected by said Board shall be placed to the credit of a fund. Any funds remaining on hand after the payment of costs and expenses as in this Act provided, may be used by the Board for the purpose of elevating the standards of schools of training for medical technicians, and of promoting the educational and professional standards of medical technicians and of medical technology in this state."

Interpretation of such a provision stated in the Alabama Act for medical technologists comes as close to the ideals set forth by the Council on Medical Education and Hospitals of the American Medical Association, and the American Society of Clinical Pathologists and the Registry of this Society, as any of the proposed statutory legislation that I have had the opportunity to review. There is in this Act not only the purpose of developing medical technologists of a very high standard, registered by the State of Alabama, but a provision in the Act which calls for the training schools to meet the requirements of the aforementioned medical organizations. This Bill further provides that the medical technologist in the hospital must work under the supervision of a pathologist, and although there is no mention in the Act of privately owned commercial laboratories, there is an implication that such laboratories must be under the direction of a physician-pathologist.

In California, Chapter 804, Laws of 1937, there is an Act relating to the conduct of clinical laboratories and the licensing of clinical laboratory tehnologists for the purpose of protecting the public health. Such a purpose appears very laudable, but when one reads Section 1 of this bill, it states, "It shall be unlawful for any person, firm, association or corporation to conduct, maintain or operate a clinical laboratory as defined herein unless such clinical laboratory shall be under the immediate supervision and direction of a licensed clinical laboratory technologist as herein defined or of a person holding a valid and unrevoked physician's and surgeon's certificate issued under provisions of the State Medical Practice Act of this State." This sounds paradoxical as compared with the title of this Act which indicates that its purpose is to protect the public health, because Section 1 states very categorically, that the clinical laboratory shall be under the immediate supervision of a licensed technologist or a physician. The California Act defines a clinical laboratory as "any place, establishment or institution organized and operated for the practical application of one or more of the fundamental sciences by the use of specialized apparatus, equipment and methods for the purpose of obtaining scientific data which may be used as an aid to ascertain the presence, progress and source of disease." A clinical laboratory technologist is defined as "any person who engages in the work and direction of a clinical laboratory as herein defined," and a clinical laboratory technician according to the California Act is "any person other than a physician and surgeon who under the direction of a clinical laboratory technologist or a physician and surgeon, performs the technical procedure called for in a clinical laboratory as herein defined." Thus far it is an attempt according to the title of the California law to protect the public health of the people of California, but according to their own definitions of a clinical laboratory and the function of a medical technologist it seems that the protection of public health is not very thorough. The Act further states that the State Board of Public Health may issue a certificate of licensure as clinical laboratory technician to each person found by it to be properly qualified and is successful in either a written or practical examination. Nothing thus far has been said pertaining to the proper training of the technologist, or the schools where the technologists may receive their training, comparable to that now in existence under the Registry of the American Society of Clinical Pathologists. California law, in licensing technologists, states that any person who has for one year performed clinical laboratory work in a clinical laboratory in the State of California shall be granted a certificate of licensure as a clinical laboratory technician without examination; and it shall be unlawful for any person to act as a clinical laboratory technologist without certification as clinical laboratory technologist as provided herein. The Law states further, that it shall be unlawful for any one operating or maintaining a clinical laboratory to employ any technician ex-

cept those certified as provided for in this Act. On such a basis anyone who has spent one year in any hospital laboratory can qualify as a medical technician and anyone who can satisfy the California State Board that they can pass, according to their standards, a written or oral examination, receives a State Certificate as a medical technician or medical technologist. Thus, there is in California an attempt to control, by licensing, medical technicians or technologists, probably on a plan similar to licensing of any trade or profession by the State. To promote a similar law, to become enacted in our states comprising the Tri-State Hospital Assembly, would be to defeat the high educational efforts thus far maintained by the Registry of the American Society of Clinical Pathologists and the Council on Medical Education of the American Medical Association. There have been attempts made in some states to license technicians or technologists in a plan similar to that of California, but these bills did not pass. One bill was introduced in Florida in 1941, one in New York in 1947, and another in New Jersey in 1948. There may be some advantages in putting some procedures into effect whereby a physician desiring the services of a technician or technologist can have the assurance that the persons he employs to perform these duties is one properly qualified, such as, by state licensure. But as I have indicated, with the possible exception of Alabama, there is no law in any of the states that controls the training schools as well as the work of the technologist, as is now being done by the Registry of Medical Technologists. Our problem, therefore, is to persist and insist that the medical profession maintain their patients' interests and demand that the clinical laboratory service for their patients shall be in the hands of properly qualified personnel. If they desire technical help in their offices, they can insist that the person be registered by the American Society of Clinical Pathologists. If such cooperation is obtained from the medical profession in support of the standards adopted by the Registry of Medical Technologists, then there will be no need for state licensing boards controlling medical technologists. There are registries for physical therapy technicians and x-ray technicians, and these registries as well as others pertaining to the field of medicine can very assuredly be of service to physicians. The welfare of the patients will be protected because of the competency of the technicians' ability, maintained by the rigid standards of their respective specialties. The employment of such personnel will be encouraged if physicians and hospitals would cooperate with these groups and not employ any applicant unless certified by the Registry. Until such time when legislation is enacted licensing clinical laboratories, and prescribing proper educational controls for medical technicians and medical technologists as is now assured by the agencies mentioned above, we must continue on the scientific level as is now in force with continued support of the Registry of Medical Technologists.

CORRECTION! PLEASE NOTE

Because of a printing error, the name of James H. Appleman, M.D., Chicago did not appear as co-author of the article "Dyslexia From the Physical Viewpoint" which was published on page 30 of the January 1950 issue of the Journal.

We regret this omission. Dr. Appleman's name will appear on the reprints, and will also be listed as co-author in the volume index published in June 1950.

The Bladder in Pregnancy

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The purpose of this paper is to summarize the management of the bladder through-out pregnancy and the puerperium. We believe that too little attention has been given this subject in the literature. Perhaps some of the substance of this paper and the pertinent facts herein may appear as obvious deductions. However, in spite of this possibility, I think a remainder of the role that the bladder plays in pregnancy will be of some benefit to all of us.

To-day the bladder is not forced to take all the abuse during pregnancy and delivery that it did in the past. Now, one seldom sees the many types of bladder, urethra, and vaginal fistula formations due to mismanaged vaginal deliveries. Better prenatal care has resulted in earlier diagnosis of abnormal presentations and cephalopelvic disproportions. The advent of antibiotics and chemotherapy have made late caesarean section safer than a difficult and forceful vaginal delivery. It is an accepted principle that a fully dilated cervix and an adequate episiotomy are necessary for all vaginal deliveries. These have all contributed to the safety of the bladder.

Because of its crucial anatomical position in relationship to the pelvis and the pregnant uterus, the bladder is often injured despite all precautions. A full bladder during pregnancy and labor produces much unnecessary discomfort to the patient. Sometimes even well conducted deliveries may produce complicating cystoceles with or without the distressing and embarrasing stress incontinence.

Anatomy: The urinary bladder is a hollow viscus, whose form, size, and position varies with the amount of urine it contains, and the period of gestation. The average bladder is capable of holding, without distention, about 500 cc. of urine. The adult organ in an empty condition lies at the level of the oblique plane of the pelvic inlet. Filled, it rises into the abdomen. In pregnancy, especially after the fourth month of gestation, even the empty bladder is an abdominal organ.

The bladder is supported abdominally by the so called false ligaments which are merely folds of the peritoneum on the superior, lateral and posterior surfaces; the middle umbilical ligaments which are the remains of the uracus; and the lateral umbilical ligaments which are the remains of the obliterated umbilical arteries. These act as a guide in maintaining the bladder against the abdominal wall. Conditions causing excessively enlarged abdomens and multiple pregnancies disturb these supports.

The pelvic support of the bladder is chiefly the visceral layer of the pelvic fascias, or the retinaculum uteri, or endopelvic fascia. Chief of these are the pubovesical and vesicouterine. The uterosacral and cardinal ligaments also aid in bladder support. Too early bearing down or forceful deliveries with a cervix not fully dilated will cause a tearing of these ligaments, with a stripping of the bladder from the fascial supports. This is one of the main causes in the cystocele formation.

The vaginal supports are chiefly the urogenital diaphragm and the levator ani. The perineal body fuses these supports in its central position between the vagina and rectum. Forceful or too rapid delivery before the vagina is properly dilated, especially with an inadequate episiotomy, will cause a rupture of the perineal body and an over stretching or tearing of these supports. There is then a sagging of the urogenital diaphragm. This increases the cystocele and urethrocele formation and is probably one of the main causes of stress incontinence. This latter complication is probably one of the most distressing end results associated with child birth. Thompson, Savage, Holt, Lesshaft and Smith believe that injury to the pubococcygeus portion of the levator ani, plus the deep transverse perinei

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muscle would be the most important factor to produce cystocele and stress incontinence. They believe that continence, or bladder control, depends on the ability of the bladder base to desend to initiate urination and to return to its normal level to stop the act. If this ability is lost and the bladder base is on a level with the sphincter, the premicturition condition is present and a further descent by cough or body movement in an up-right position causes the spilling of urine or what is called stress incontinence. Other explanations are given. Bonny deduced that urinary loss resulted from a sagging of the bladder neck due to stretching of the pubo cervical fascia. Phaneuf, Hefferman and Kasdon refer to stress incontinence as a condition that occurs when the sphincteric action of the bladder neck and urethra has been impaired by childbirth. Kennedy believes it is due to trauma to the inner and middle third of the sphincters of the urethra causing them to be partially fixed by fine bands to the posterior lateral margins of the adjacent pubic rami.

Definite physiological changes occur in the bladder and urethra in pregnancy, but not in the same degree as the changes in the uterus, cervix and vagina. Few changes occur before the 4th month, after which time the increased size of the uterus, hyperemia and hyperplasia of the bladder muscle and its connective tissue, brings an elevation of the trigone with a thickening of its posterior or interureteric margin. This continues to the end of pregnancy. There is little change in the mucosa, but the blood vessels increase in size and tortuosity. The bladder is influenced by the usual hormonal changes of pregnancy, but not to the same degree as the ureters and the kidney. There is an atony of the bladder musculature. The dextro-rotation of the uterus pushes the bladder to the right of the midline in about 80% of the cases.

In the early antepartum period, a full urinary bladder has been mistaken for an enlarged uterus or an ovarian cyst. Care must be taken to insure bladder emptying or catheterization before examination.

Bladder symptoms may arise at anytime during pregnancy. Frequency of urination may occur in the second and third months by pressure of the pregnancy, by dextrorotation of the uterus, and diminshed capacity of the bladder. Examination of the urine at this time will rule out a urinary infection. Cystitis may be present during pregnancy, generally in the last half and most always associated with a pylonephritis. Sudden onset of frequent, painful urination associated with lumbar pains, chills, and fever are diagnostic of this disturbance. The antibiotics and sulfonimides generally produce a rapid control of the infection.

One of the most serious complications to the bladder early in pregnancy is that produced by an incarcerated uterus, which fills the pelvic cavity and gives rise to characteristic symptoms. these are: pains in the lower abdomen and back, disturbances of the functions of the urethra and bladder causing ischuria, which gradually increases until paradoxical incontinence occurs. If this condition is not soon relieved, the symptoms become more intense and bloody urine is passed. Eventually gangrene may result with necrotic portions of the bladder mucosa being expelled through the urethra with cramp like pains. In some cases the weakened walls of the bladder are unable to withstand the distention and rupture may occur, followed by peritonitis.

We wish to cite two cases of incarcerated uteri and our managment. Mrs. A. G. (No.46-1813), was admitted to the hospital with the history of being unable to urinate. She was catheterized frequently for five days with no improvement. Amounts up to 1500 and 1700 cc. were obtained at various times. Two attempts were made, one under gas anesthesia to correct the incarcerated 4 month pregnant uterus, but both failed. A laporatomy was performed and the gravid uterus lifted up easily after freeing a few bands of adhesions. The patient made an uneventful recovery and was discharged on her eighth post surgical day. Catheterization was only necessary for two post surgical days. She went on to term and delivered spontaneously on 9/2/46.

The second case was a Mrs. E. E. (No. 46-7590) admitted to the hospital 3½ months pregnant and unable to urinate because of an incarcerated uterus. Under gas anesthesia the retroflexed incarcerated uterus was corrected and the vagina packed. A retention catheter was left in the bladder and the patient made an uneventful recovery. She was discharged on her sixth hospital day, voiding without difficulty. She delivered uneventfully 3/17/47.

H. H. Fouracre Barns believes that the distended bladder caused by an incarcerated uterus should be decompressed slowly by continuous catheterization. Successive twenty-four to forty-eight hour trials of postural treatment and the use of a vaginal pessary is then attempted. If this is not sufficient, manual reposition is necessary.

Greenhill states that he has rarely had to elevate a retroflexed pregnant uterus or insert a pessary. He has done so only in cases of obstruction of urine, and has operated only once for an adherent retroflexed uterus with blockage of urine. In nearly all pregnant women the retroflexed uterus rises out of the pelvis spontaneously and manipulation of the uterus is not necessary. He believes that more harm has been done by forcible efforts to elevate the retroflexed pregnant uterus than by not interfering.

The bladder in labor can be discussed for each stage. Titus has stated that a distended bladder may delay the first stage of labor by minimizing the effectiveness of the pains and produce a secondary inertia, acting as a serious impediment to progress in all three stages. The upward retraction of the bladder and the mechanical obstruction or pressure from the advancing head beneath the bladder and urethra are responsible for failure to void. Parodoxical incontinence or the frequent repeated involuntary passage of urine during pains should be taken as evidence of an over distended bladder.

A full bladder in labor may be mistaken for the dilated lower uterine segment with a pathologic retraction ring and threatened uterine rupture because of the sharp cramp like pains and tension of the supra-pubic region. No. N. 8464 — Mrs. D. M. age 26, grava 11, para 1, due date 7/20/47. Entered hospital 1:30 AM on 7/16-/47. with ineffectual pains 5-7 minutes apart for ½ minute. Rectal examination revealed 2 cm. dilatation, head in a high minus position. After 27 hours in first stage, patient appeared in great pain, was restless and noisy. She had been passing frequent small amounts of urine. Abdomen was moderately tense and contracted all the time, extremely tender suprapubically. Rectal examination revealed what appeared as a bulging bag with cervix 7-8 cm. dilated with head not engaged, and pains almost continuous. Diagnosis — threatened rupture of lower uterine segment appeared as a possibility. However, a full bladder obstructing delivery appeared more likely. Catheterization relieved the extreme discomfort of the patient and the abdominal tension, and the contractions assumed a normal course with resulting rupture of the membranes and a rapid delivery.

Kantor, Miller and Dunlap believe that a full urinary bladder may obstruct labor until the presenting part lies deep in the pelvis, after this time the bladder becomes an abdominal organ and routine catheterization is not needed at this time. They believe more-over that retention of some urine may protect the bladder from undue pressure against the symphysis. However, routine catheterization every four hours during labor and before delivery is advisable in most cases.

DeLee and Greenhill state that a cystocele may prolapse before the advancing head and delay labor. It has been punctured for the bag of water, and torn off as a tumor. No. 30257 — Mrs. A. B. age 33, grava 111, para 11, due date 9/1/44. Entered the hospital 4:30 AM 8/30/44. Pains irregular, with 2-3 cm. dilatation and presenting part in a high minus station. Patient had been urinating frequently. No palpatable supra pubic mass that would suggest a full bladder was present. However, patient was restless and complaining of a severe abdominal pain. Rectal examination was unsatisfactory, dilatation and position were indefinite. Frequency of pains was uncertain because of a sensative hard abdomen with a hard mass in lower right quadrant. X-ray was ordered, but because of the extreme discomfort of the mother a steril vaginal was ordered. This examination revealed a soft, bulging mass; the cervix and the head or presenting part were not palpatable. A small amount of vaginal discharge was present so a previous rupture of bag of waters was suggested. The impulse to rupture this bulging mass was thus controlled and catheterization was done. As the bladder emptied, the head engaged and descended rapidly, delivering as a R.O.P.

Bloody urine in the second stage is generally due to cephalopelvic disproportion, the bladder being caught between the presenting part and the symphysis during strong uterine contractions. If this pressure is allowed to continue, serious damage to the bladder would result, such as bladder necrosis and fistula formation.

The distress produced by a distended bladder is generally temporary, while the distress produced by traumatic injury to the bladder is almost always permanent.

Titus refers to a case of a distended bladder in the third stage that interfered with the expression of the placenta for five hours. The placenta was expressed after catheterization with removal of thirty-eight ounces of urine. DeLee and Greenhill confirm that a full bladder can be an obstacle for placental delivery.

Last but not least in importance is the postpartum bladder, because when neglected it is associated with severe discomfort to the patient and can be the cause of a prolonged bladder infection. Edema of the trigone, and direct trauma to the urethra occur frequently in well managed obstetrics. Decreased bladder tone and less intra-abdominal pressure account for a greater quantity of urine to accumulate. Titus has stated that retention of urine following delivery is a frequent complaint, and any patient whose uterus, during the early hours of puerperium, is found displaced upward, or to one side and who passes small amounts of urine at frequent intervals has a distended bladder. Nurses and Doctors are remiss who do not recall this and who fail also to remember that the bruising of the base of the bladder and urethra, vaginal trauma and hemorrhoids, may impair a patient's usual sensations so much that she may be unable to realize her need to void. This involutary passage of small amounts of urine is known as paradoxical incontinence and is merely an over flow of a distended bladder.

The same care to determine the condition of the postpartum uterus with relation to bleeding should be given the bladder in relation to complete emptying for the first 24 to 48 hours. The responsibility for this rests entirely with the attending physician and not with the nursing, resident, and interne staff. It is his business to keep others alert to the problem and confirm by his own examination. Any evidence of a soft fluctuant supra-pubic mass should be diagnosed as a full urinary bladder and catheterized even though the patient has been passing frequent small amounts of urine. The catheterization should be performed with care, skill and sterile precautions. Some believe a soft mushroom catheter should be used and removed only after less than 50 cc. remain as a residual. Instillation of argyrole like preparations should be used at the discretion of the attendant. To-day early ambulation or allowing the patient to sit upright has aided the early emptying of the bladder. The use of chemotherapy and antibiotics are a good adjunct in any case of suspected bladder complications.

No. 432, Mrs. H. S., age 28, gravida 1, para 0, due date September 30, 1927 entered hospital 7:00 PM 10/6/27. Pains 3-5 minutes, 2-3 cm dilatation with head in minus one station. Early bearing down was encouraged before full dilatation, with subsequent hemorrhoidal formation and edema of the perineum. After twelve hours of labor, mid forceps were applied without an episiotomy. Delivery of an 8 lb male child at 5:30 AM 10/7/27. An extensive second degree tear occurred plus a partial rectal prolapse. Frequent urination was present on the first and second post partum days. The patient was very uncomfortable and restless. The abdomen appeared enlarged but was thought to be the uterus by the attending physician. After forty hours of agony the physician suggested catheterization and seventy two ounces of urine were removed. Catheterization continued for 12 days. The bladder was automatically emptied at intervals for over two months before the normal urge or desire returned. A very unfortunate and avoidable complication.

Perhaps Dr. DeLee was thinking of the female bladder as well as the general welfare of the baby and mother when he coined the phrase "non vi sed arte" (not with force but skill). Certainly nothing else quite sums up the most important principle that will save the bladder from serious and permanent injury. It is the failure to adhere to this fact that strips the bladder from its pelvic attachments and over stretches or tears the urogenital diaphragm, perineal body and the levator ani. Intelligent expectancy with better managed long labors, fewer difficult forceps and freer use of late sections with the use of chemotherapy and antibiotics have upheld Dr. DeLee's excellent example and made bladder damage less frequent and less serious than before.

SUMMARY

The care of the bladder is discussed during the pregnancy and puerperium. Five cases are reported, two antepartum, two intrapartum and one postpartum.

CONCLUSIONS

1. Better obstetrics has spared the bladder many injuries.

2. Better understanding of anatomy and physiological changes of the bladder are needed for its protection.

3. Conservative care for management of bladder associated with incarcerated uterus in first trimester is advocated.

4. Systematic catheterization and care of the bladder in first stage saves the mother from unnecessary pain and favors a more normal labor and should be included in the routine of the rectal examination. The routine catheterization of the bladder before delivery is advisable.

5. Full bladder in second stage can simulate a threatened rupture of lower uterine segment.

6. Cystocele and prolapse of a full bladder in 2nd stage delays labor and is in a critical position to be seriously injured.

7. Not with force but with skill is the most important consideration for vaginal deliveries to protect the bladder from all types of injuries.

8. Paradoxical incontinence must never be confused with normal or satisfactory bladder control.

9. The care of the postpartum bladder is just as important as in other stages of labor for the comfort of the patient and the prevention of serious bladder infections.

10. The responsibility for the care and protection of the bladder rests entirely with the obstetrician and not with the others in attendance.

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Persistent Patent Ductus Arteriosus

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The symptoms caused by a perisistent patent ductus arteriosus dramatically disappear when the ductus is ligated.

A patent ductus arteriosus is normal in the newborn and the foetus, but is pathological in childhood and in the adult.

The ductus arteriosus is the vessel (artery) which connects the pulmonary artery with the aorta and whose function it is during foetal life to shunt the blood coming from the right ventricle away from the non-functioning lungs into the systemic system. Normally, the ductus arteriosus becomes obliterated shortly after birth, that is shortly after respiration has been established and the lesser or pulmonary circulatory system is called upon to take up its active part in the body's physiology.

The ill effects of a persistent ductus arteriosus vary from minimal or actually none to very severe, depending mainly on the size of the arterial shunt. The harmful consequences are due to two factors:

1. the damage produced by the mechanical changes brought about by the patent ductus.
2. the increased danger of the development of a sub-acute bacterial endocarditis, or more correctly termed, endarteritis.

Let us first consider the harmful results of the patent ductus arteriosus due to the mechanical factors.

In foetal life, the ductus carries the blood from the pulmonary artery into the aorta. As soon as the lungs expand and respiration takes place, there comes about a change in the relative blood pressures of the aortic (systemic) circulation as compared to the pulmonary circulation. The pressure in the systemic circulation rises and in the pulmonary circulation falls. Thus the blood pressure in the aorta is higher than in the pulmonary artery, and therefore the direction of the flow of blood in the patent ductus becomes reversed. So much higher is the pressure in the systemic circulation than that in the pulmonary artery, that even in diastole, blood may be propelled into the pulmonary artery.

If the size of the persistent patent ductus arteriosus is small, only a small quantity of blood will flow back from the aorta into the pulmonary artery. If this is so, only a small amount of blood will be lost from the systemic circulation and the added burden to the left ventricle will be little. The left ventricle will beat with but slightly more effort than before. The diastolic pressure in the descending aorta will drop but slightly. In the pulmonary system the effects also will be minimal. A little more blood will be forced into the pulmonary artery, even tho both the right ventricle and the left ventricle, via the shunt, are supplying the blood. The pressure in the pulmonary artery will be but slightly elevated, and thus the burden on the right ventricle will be but slightly increased.

Thus a person with a persistent patent ductus arteriosus can lead a practically normal life as long as the diameter of the patent ductus is small, and except for the increased danger of developing a sub-acute bacterial endocarditis, is not greatly jeopardized by this malformation. In fact, many a person has lived his life without ever suspecting the presence of such a lesion.

However, in a certain number of instances, the patent ductus is large. The amount of blood shunted from the aorta into the pulmonary artery may be from a third to a half of the total blood pumped out of the left ventricle. Then the mechanical changes in the circulation cause the marked symptoms which bring the patient to a doctor for help.

When the shunt from the aorta into the pulmonary artery is large, the left ventricle is forced to pump more blood into the systemic circulation to supply the needs of the blood, to compensate for the blood lost through the shunt. The pressure in the pulmonary artery rises and calls for a greater effort on the part of the right ventricle

Senior attending surgeon Michael Reese Hospital.
Presented at Post-Graduate Conference Rockford, Illinois, Nov. 10, 1948.

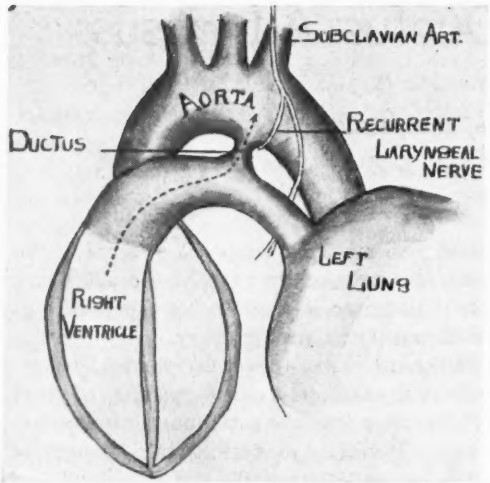

Figure 1. Normal condition of heart and large vessels in the foetus, showing the patent ductus and the direction of the blood stream from the right ventricle into both the lungs and the aorta.

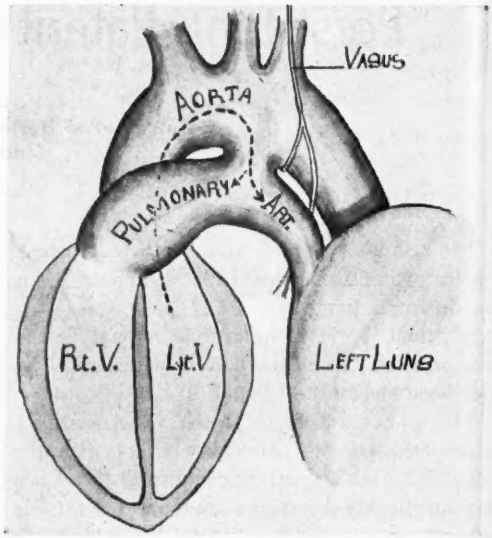

Figure 2. Blood flow in the presence of a persistent patent ductus arteriosus showing the regurgitation of blood from the aorta into the pulmonary circulation.

to empty itself. Life is maintained by a gradually developing cardiac hypertrophy. Sooner or later, the increased burden on the heart begins to tell, and failure of the heart muscle to perform the excessive task demanded manifests itself.

The symptoms of a patent ductus arteriosus usually appear gradually and not until the child is old enougth to be active — usually not until school age.

In most of the patients that I have seen, the first thing noticed which made the parents think that something might be amiss with the child's health was the fact that the child was puny, smaller than other children of the same age. Later, the parents notice that the child is not as eager to enter active games as other children. This is, of course, more noticeable if the patient is a boy. If urged, the child will be active for a short time, but will tire more quickly than the normal child. The child will become dyspnoeic on less and less exertion, and may complain of palpitation. Children with large patent ducti seem more prone to respiriatory disease.

On examination, the child may not only be undersized, but seem malnourished. There will be no cyanosis. This is to be expected because it is not unoxygenated blood which gets into the general circulation but oxygenated blood which gets back into the pulmonary circulation thru the ductal shunt. Neither is there clubbing of the fingers. A tentative diagnosis can frequently be made simply by placing the hand upon the child's bare left chest. The thrill resulting from the large amount of blood rushing out of the aorta thru the ductus is so obvious and so startling that once felt will always be remembered. This thrill is of greatest intensity over the second interspace just below the left clavicle. With the stethoscopic, the well-known "machinery murmur" will be heard. This murmur is well named, and sounds for all the world as if a newspaper press were running inside the chest. It is a continuous, rough murmur with a slight systolic accentuation. It is best heard in the second left interspace in about the mid-clavicular line. It is transmitted upwards along the vessels of the neck and backwards to the intra-scapular regions. It is even more obvious and startling than the palpable thrill. On percussion, the heart will be found enlarged and this will be confirmed by x-ray. X-ray will show the enlargement to be due not only to the increase in size of the left ventricle, but also the right ventricle. Moreover, x-ray will demonstrate the marked increase in the pulmonary artery and conus. (Figure 3) The hilus shadows will be marked because of the engorgement of the pulmonary arteries. Fluoroscopy will demonstrate the so-called "hilar dance," that is, the pulsation of the pulmonary arteries.

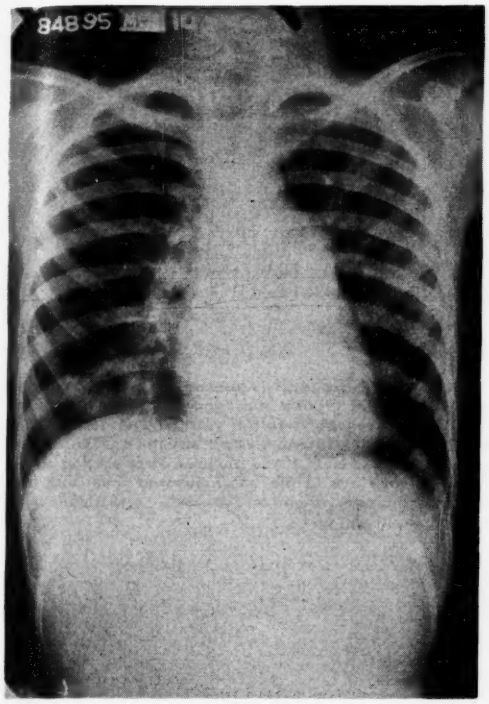

Figure 3. X-ray of patient with persistent patent ductus arteriosus showing the enlargement of the pulmonary artery and the increase in hilar shadows.

The blood pressure will show a disproportion of the systolic pressure as compared to the diastolic pressure. This may be so marked, especially after exertion, when the diastolic pressure may be extremely low, that the pulse may resemble the "Corrigan pulse" of aortic insufficiency.

The indication for operation is the disability shown by the patient. Several things must be borne in mind. It must be realized that the condition can in no way rectify itself. The heart of the patient with a patent ductus arteriosus has a burden to bear on top of what the normal heart must carry. It naturally will fatigue more easily when subjected to the additional loads that in normal living are continually being thrown on the heart. *The more the activity of the child is* limited, the less, of course, will be this additional *cardiac burden. But it must be realized that* restriction of activity is not without harm, both physically and psychologically.

Of all the congenital cardiac malformations which can be aided by surgery, the simple persistent patent ductus arteriosus is the one which can be cured. The cardiac physiology can be returned to normal as soon as the dustus is obliterated either by ligation or section. Even the cardiac hypertrophy will gradually disappear.

In deciding whether or not to advocate surgery, the risks involved in the operation itself must be weighed in the balance. It has taken a long time to overcome the prejudice against operations within the thoracic cavity. However, the time is now here when any enlightened surgeon will concede that the thorax is as amenable to surgical

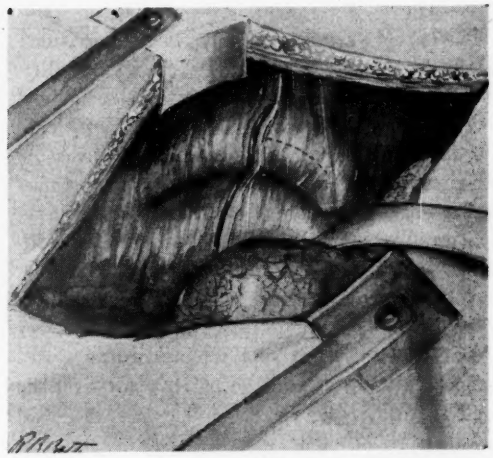

Figure 4. First step in operation. The pleura has been opened, the left lung has been retracted downwards, and the arch of the aorta and the pulmonary artery can be seen thru the mediastinal pleura. The dotted line shows site of incision into mediastinal pleura.

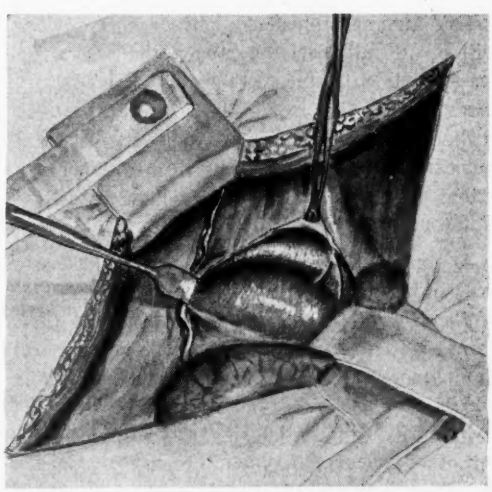

Figure 5. Second step in operation. Mediastinal pleura has been incised and site of the ductus is being cleared. Note recurrent laryngeal nerve coursing under aortic arch. The ductus will lie just anterior.

procedure as the abdomen. The operation should, of course, not be done by a tyro, nor for that matter by any surgeon who is not completely familiar with the anatomy of the region to be attacked, and furthermore, should not be done by any surgeon who has not sufficient knowledge to recognize the presence of other, unsuspected cardiac anomalies, should they be present.

In competent hands, the operation for the obliteration of an uncomplicated patent ductus arteriosus is not difficult and has a negligible mortality and post-operative morbidity.

The second harmful consequence of a persistent patent ductus arteriosus is the increased liability to the development of a sub-acute bacterial endocarditis. Why that should be we do not know. We do know that the proportional incidence of sub-acute bacterial endocarditis is many times higher in persons with a patent ductus arteriosus than in others. Thanks to Libman and Tauroff, we also know that ligation of the ductus may be followed by a dramatic cure. Within minutes after the ductus is obliterated, the blood cultures become sterile. The septic temperature abates temperature abates and the patient starts on the road to recovery.

The operation for obliteration of the ductus, in this case, may be difficult. The inflammatory reaction in the tissues around the ductus, the presence of inflammed lymph glands, and the friability of walls of the vessel, especially the posterior wall, form a hazard not present in the case of an uncomplicated ductus. However, in spite of difficulty and the danger, the risk of the operation is still much less than the risk of not operating. "The results of operation are so brilliant that a patient with a sub-acute bacterial endocarditis in whom there is any suspicion of a patent ductus should have the benefit of an exploratory operation."[1]

A word of caution is indicated. Dr. Taussig says, in her textbook, "Congenital Malformations of the Heart," "Altho in its most characteristic form a patent ductus arteriosus is relatively easy to diagnose, there are several conditions from which it must be differentiated." The chief point in the differential diagnosis will be to rule out other concurrent congenital malformations of the heart. Especially is it imperative to rule

[1]Helen B. Taussig, *Congenital Malformations of the Heart*, p. 348.

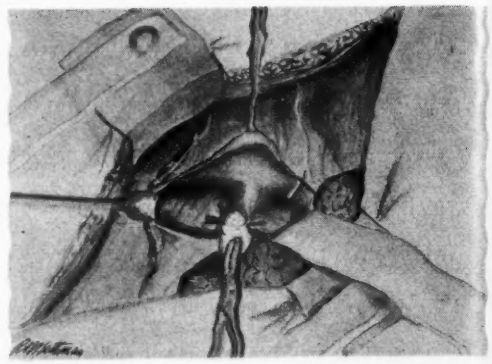

Figure 6. Third stage in operation. The pulmonary artery, which is greatly enlarged and distended, has been compressed by a cotton pledget. Note that the ductus is a broad and very short structure. The ductus is being freed. Note these pictures of operation show things as they are in the uncomplicated case, and not as they appear when a sub-acute endocarditis is present.

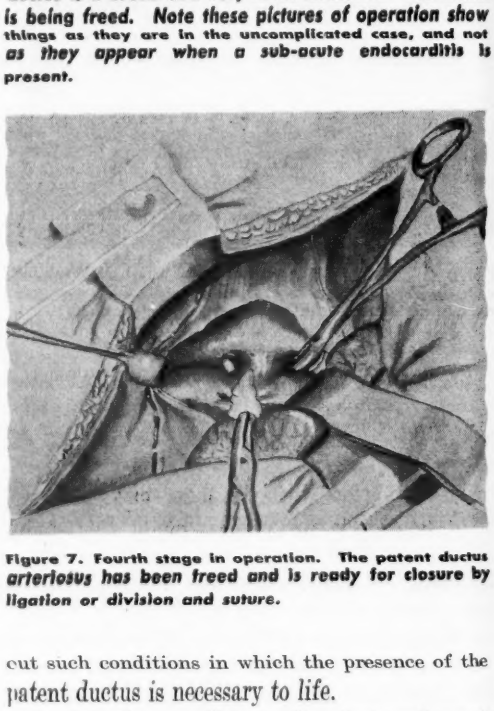

Figure 7. Fourth stage in operation. The patent ductus arteriosus has been freed and is ready for closure by ligation or division and suture.

cut such conditions in which the presence of the patent ductus is necessary to life.

As in other conditions, the first and most important factor in the diagnosis of a persistent ductus arteriosus is the knowledge on the part of the family physician that such a pathological entity exists. Like many other pathological conditions, once the physician is on the alert he will be surprised to find the disease not as uncommon as he had thought it to be. The symptoms may be confused with those of other cardiac maladies, or conditions which result in general maldevelopment and easy fatigue, but the signs are startling. The palpable thrill over the card-

iac area and the rumbling murmur over the second interspace are striking.

I will not devote much time to the techniques of operation, further than to explain briefly what is done.

The anaesthetic is best given by means of an intratracheal tube. The patient is placed on the right side with a sandbag under the left shoulder. The incision is made thru the left anterio-lateral thoracic wall starting in the third interspace. After the chest is opened and the left lung well retracted, the arch of the aorta and the bulging pulmonary artery will be distinguished under the mediastinal pleura. The left phrenic nerve will be easily visible anterior to the ductus; the vagus nerve, if it can be seen, will be posterior to the ductus. The left subclavian artery arises from the arch of the aorta opposite the entrance of the ductus. When the mediastinal pleura is split and the arch of the aorta exposed, the recurrent laryngeal nerve will be seen passing under the arch of the aorta dorsal to the ductus. This nerve must not be injured. The exact site of the ductus is also easily located by finding that spot where the palpable thrill is completely obliterated by gentle pressure of the finger. The obliteration of this thrill is startling. If the thrill is not completely checked, it may mean that another congenital defect may be present.

The isolation of the ductus is done by blunt dissection and in the absence of infection is not difficult. Contrary to most descriptions in the literature, the patent ductus arteriosus in a patient who has marked symptoms will be a broad-short vessel; in some cases it will even appear as if the aorta and the pulmonary artery were actually approximated rather than connected by means of a duct.

The obliteration of the ductus is brought about by ligating the duct, or by actually dividing and suturing the duct.

The ligation of the duct is by far the simplest method, but in a certain small number of instances, it may be followed by a recanulization of the duct.

The chest wall is tightly closed, without drainage, after the left lung has been inflated.

The post-operative treatment is purely symptomatic, and usually uneventful. The children be up in a wheel chair the next day.

Their metamorphosis from puny, weak children unable to partake in school activities to healthy, normal individuals is, as I said in my opening statement, dramatic.

CONCLUSIONS AND SUMMARY

A persistent patent ductus arteriosus is a pathological condition which may be harmful either because of the change in the mechanics of the circulation or because of the increased tendency towards sub-acute bacterial endarteritis.

The symptoms subsequent to the altered mechanics simulate those of cardiac insufficiency or other conditions which produce fatigue or malnutrition. The signs are strikingly evident. They consist of a loud easily audible continuous murmur best heard over the second left interspace, and an easily palpable thrill over the entire precordium; these two signs along with the absence of cyanosis should make any physician suspect the presence of an aortic-pulmonary artery shunt. Ligation or suture of the patent ductus cures the condition. The operation, especially in the absence of a complicating endarteritis, is simple, and the risk involved minimal in comparison to the danger of the disease and to the excellent results obtained.

YOUR ANNUAL MEETING-SPRINGFIELD
MAY 23, 24, 25

Cystitis in the Female: Interstitial Cystitis

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Chicago

The immediate past third of a century has witnessed innumerable enlightening if not definitely astounding revalations in the medical sciences. This is particularly true in the field of Urology. However, cystitis in women is apparently not much better understood today; or, if so, our knowldege is not crystallized, organized and classified in such manner as to be understood and imparted. Interstitial cystitis, as judged from reports in the literature, is not an uncommon condition; it is possibly sectional in location or even limited to certain areas in the same city or locality.

One would be justified, from the foregoing statement, in assuming that the author does not look upon the symptom-complex termed interstitial cystitis as a distinct entity, but rather as being of the opinion that sufficiently diligent and elucidating search for etiological factors was amiss. He has reached this conclusion because of several reasons. No proved cases were seen during a training period of several years in a hospital with a large urological service and as an assistant to a busy urologist. Nor have any been encountered during an active practice of a couple of decades. However, during this time a number of patients have been seen in whom such a diagnosis had been made. In fact, during several consultations the classical cystoscopic picture was reproduced. This is readily accomplished when one has a total disregard for trauma of the bladder, no longer considering it a rather delicate internal organ. Not only the blood vessels but the viscus itself may be ruptured by forced distention.

The ramifications of cystitis are so multitudinous that it is quite difficult to break the subject down into parts. But questioning the accuracy of the diagnosis, or at least anxious to learn more about interstitial cystitis, three pathologists of wide experience, Drs. Perry Melnick, James P. Simonds, and Lester King, were queried as to whether they had ever seen a case. The answer from each was in the negative.

A wide variety of etiological factors are involved in the subject of cystitis in particular and the symptom complex known as interstitial cystitis incidentally.

Certainly none of us with all our considerable present-day knowledge of this condition will be able to secure uninterrupted success in its management. The hidden, obscure and intangible factors are too numerous.

Bladder neck obstruction in the female is of rather common occurrence. The author was struck by the number of years which passed before seeing a patient requiring urologic surgery, at the same time encountering quite a number relieved by gynecologic surgery, and then within a short period of time examining several upon whom such surgery was necessary. It not infrequently happens that both urologic and gynecologic surgery must be performed upon the same patient to secure satisfactory results.

The evidence of a glandular obstruction analogous to the prostate in the male is not convincing. Much the same picture may be found in protracted chronic irritation.

While most of the relaxations and weaknesses of the pelvic outlet are traumatic in origin, one must be constantly aware of the occasional individual with constitutional weakness of these supports. In either the bladder's position is altered resulting in inadequate drainage, stasis or, at best, a congestion is present, eventually terminating in a cystitis, possibly acute but more likely attenuated with repeated exacerbations.

Caruncles are notorious for their accompanying symptoms of cystitis. It is well to be alerted for associated lesions, since there are too many caruncles which produce no symptoms to consider them the only factor involved. Frequently the

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caruncle is only the prolapsed portion of a redundant mucous membrane. On endoscopic examination the normal pink has been supplanted by a blue, cyanotic, frequently granular appearance. The possibility of malignancy must be constantly borne in mind.

The classical symptoms of interstitial cystitis are commonly manifested in several other diseases and such a diagnosis erroneously applied to them, e.g., tumors of the bladder and the permanent cicatricial changes occurring in the vesical wall following their treatment, the same sequelae following treatment for varicosities of the bladder wall and chronic cystitis of a wide etiologic variety but particularly chronic infiltrative cystitis, and in the male, the cystitis following surgery of the prostate and especially the transurethral resection of the prostate.

There are other extra-urinary causes to be considered, such as pressure from the uterus and adnexa. Adhesions of these organs may cause distorsions of the urinary bladder with urinary symptoms.

Foci of infection may result in cystitis; the route may be hematogenous, lymphogenous and by direct contiguity of tissue. Infections in the cervix appear to play a role. It seems that constipation if not actually an etiologic factor, at least helps maintain an inflammation in the bladder. It is rather surprising the number of bladder symptoms in intestinal diverticulosis, even though the symptoms of the primary condition may be practically nil, and in the absence of a fistulous opening into the bladder.

Gynecologic operations appear to be a source of bladder complaints. Interference with the normal blood and nerve supply is considered the factor at fault.

Strictures of the female urethra give rise to symptoms of cystitis. In this category I like to include those cases, as in the male, that have no definite obstruction to the passage of a sound or diagnostic bougie but do have sufficient scarring over a wide area to produce a variety of annoying urinary symptoms. Why some patients have symptoms out of all proportion to the pathology present may possibly be accounted for by the interference with the normal innervation and nutrition. At best, urethral pathology is difficult to determine and may be easily overlooked even when being searched for diligently.

Diseases of the upper urinary tract, kidneys and ureters, are a very common source of bladder symptoms. It is of paramount importance to know and to remember that infection of these structures is not necessary in order to cause most annoying symptoms of frequency, dysuria and even pain in the bladder region, e.g. hydronephrosis and calculus disease, and, of course, this the rule rather than the exception, in fact almost the invariable rule when infection is present. There are several things which are most important in this connection. The upper urinary tract may be involved and show little or no x-ray or other evidence of organic change. The laboratory usually furnishes invaluable help but sometimes next to none and one must depend upon one's own clinical judgment entirely. In the same individual there may be pus or red cells on one examination and absent on another. The same may be said about the bacteria. The cultures and smears may be positive or negative. The culture may be one and the smear the reverse. These may change and vary .There may be a high fever with few findings but relieved by treatment or surgery.

A rather remarkable thing about the vast majority of cases that present diagnostic and management difficulties is the age of the patient. The majority are either threatened with the menopause, are experiencing it or have passed it. This is so common that it cannot be considered wholly coincidental. When we see the senile changes in the tissues one must conclude that hormonal changes are a factor in causation.

Avitaminosis and the habits of the individual are important factors. Occasionally one cures a patient of day and night frequency by withholding coffee or other diuretics.

Some of these patients' complaints appear to be histamine reactions which are relieved by the anti-histamine drugs. But particularly in this class there may be two or three factors involved. We have had under observation, together with several other specialists, an elderly woman of 70 years who complains of the classical symptoms of interstitial cystitis, associated with pruritus vulvae with the vulva and adjacent parts red, angry and swollen. She also suffered from moderately severe acne rosacea. Her symptoms are relieved or kept under control by administration of estrogens, thiamine and an anti-histamine preparation.

Psychogenic causes may be encountered and are commonly overlooked or misinterpreted. The surgeon must needs be constantly on guard. The symptoms these individuals present are certainly numerous and bizarre.

Those patients who show obvious infection should receive the necessary urinary antiseptic or antibiotic. The sulfonamides still have a definite place in treatment. The importance of mandelic acid has lessened with the discovery of more recent remedies, but on occasions the combination mandelamine is serviceable when others are disappointing. The same may be said, on rare occasions, for methenamine. The results from penicillin and streptomycin therapy have been startling in those types of organisms suited to their use. The newer antibiotics, aureo-mycin and chloromycetin, appear to be of considerable value in certain types of urinary infections.

The extremes of the pH range are antiseptic but difficult to reach and difficult to maintain. Both strongly acid and strongly alkaline urine are either bacteriocidal or bacteriostatic.

The treatment of these people depends for its success upon a thorough appraisal and adequate comprehension of the cause or causes involved. The silver nitrate treatment in increasing strengths popularized several years ago has not proved to be particularly effective. The possibilities here are so great that their management is interesting to say the least.

55 East Washington Street

Cutaneous Biopsy:
A Safe and Valuable Diagnostic Procedure

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Chicago

Biopsy (Bios-life — opsis-vision), the removal of tissue from a living person for microscopic examination, dates back to the middle of the the nineteenth century when a number of pathologists both in the United States and in Europe began to recognize the diagnostic value of properly performed biopsies. Virchow laid the rational foundation of the procedure in 1854 when he demonstrated microscopically that excision was the proper treatment of malignancies because of the possibility of their complete eradication in the early stage of the disease.

Bloodgood, Ewing, McCarthy and Wood were all instrumental during this century in bringing about the recognition of biopsies as a valuable diagnostic procedure.[1]

The histologic study of skin is of value not only in the diagnosis, but also in the prognosis and treatment of many disease.[2] The accessibility of the skin makes a cutaneous biopsy a safe and relatively simple procedure. However, we agree with H. Montgomery[3], who states that "Like any other single diagnostic procedure, it is far from infallible."

To illustrate the value of cutaneous biopsy as a valuable diagnostic procedure, we present a review of 117 selected cases studied both clinically and microscopically in the Department of Dermatology, Northwestern University Medical School during 1948. All microscopic diagnoses were made by a dermatologist well trained in dermatohistopathology.

According to H. Montgomery[3] the indications for biopsy are as follows:

1—If there is any doubt regarding the clinical diagnosis of a cutaneous neoplasm and certainly it is essential if a malignant epithelial neoplasm has recurred after treatment. For example, one cannot always distinguish clinically between a basal and a squamous cell epithelioma.

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2—To establish a correct diagnosis in the precancerous group of dermatoses.

3—To distinguish between the various types of pathological pigmentations of the skin.

4—In the diagnosis, prognosis and treatment of various forms of cutaneous tuberculids.

5—In investigative studies of various dermatoses.

6—To corroborate the clinical diagnosis of certain inflammatory diseases of unknown cause.

The chief objections to biopsies have been:

1—Incision of a malignant tumor stimulates local growth.

2—Incision disseminates tumor cells. Montgomery[3] and others believe that there is no danger in removal of a specimen for biopsy from a cutaneous neoplasm except in cases of melanoepithelioma or of Paget's disease of the nipple associated with underlying adenocarcinoma of the breast, in which cases the lesions should be radically excised.

Selecting both a proper site and lesions which appears to have the characteristics of the suspected condition are very important. A portion of normal skin adjacent to the lesion should when indicated be included for comparison.

The biopsies reported in this series have been taken both in private offices and in the dermatology clinic. It has proved to be a safe procedure even with routine office technic where strict asepsis cannot always be maintained. The cosmetic result, especially in lesions involving the face, is always taken into consideration but not at the cost of a correct diagnosis. If a cutaneous punch not larger than four mm. be used, sutures need not be taken and healing results with little if any scarring. Larger punches may require suturing and the resulting scar is more evident. Because of the round shape of the wound of a punch biopsy, puckering of the corners may result when sutures are used. An elliptical incision along the lines of cleavage deep enough to include some of the subcutaneous tissue or wide enough to include the specimen in toto allows a larger specimen to be taken and yet may give a better cosmetic result if the sutures (fine black silk or dermal) used to approximate the edges are not permitted to remain in the skin too long. When sutures are not used, as with the smaller cutaneous punches, bleeding may be stopped readily by a pressure bandage applied for about 15 minutes.

TABLE 1

Comparison between Clinical and Microscopic Diagnoses

CLINICAL DIAGNOSIS		MICROSCOPIC DIAGNOSIS		
		Malignant	Precancerous	Benign
Malignant	95	79	8	8
Precancerous	13	10	3	
Benign	9	9		

REVIEW OF CASES

One hundred seventeen selected cases studied both clinically and microscopically are reviewed. Of one hundred and eight cases clinically diagnosed as cancerous or precancerous, the histologic and clinical diagnoses were in agreement in eighty-two of the cases.

In thiry-five cases the clinical and histologic diagnoses were in disagreement.

Eight of the cases clinically considered malignant were found to be precancerous on section. Ten cases clinically precancerous were histologically malignant. Eight cases clinically malignant proved to be histologically benign. Nine cases called benign clinically proved to be malignant. Thus in this series of cases, the clinical and microscopic diagnoses differed in approximately thirty per cent of the cases. In the table below is given a comparison between the clinical and microscopic diagnoses. To be brief, a further breakdown in classification of the malignant, precancerous and benign lesions has been purposely omitted.

SUMMARY

Cutaneous biopsy is a valuable and safe diagnostic procedure and should be employed more frequently.

If one completely destroys the lesion without performing a biopsy one also destroys the evidence. This evidence may prove important on a patient's record.

One hundred and seventeen selected cases studied both clinically and microscopically are presented. The correlation between the clinical and microscopic diagnoses is reported.

Hence it is seen that even adequately trained clinicians with many years' experience may frequently err in the diagnosis of skin malignances. If there is any doubt regarding the clinical diagnosis of a cutaneous neoplasm, biopsy is definitely indicated.

CONCLUSIONS

1—A cutaneous biopsy is a safe minor surgical procedure which may be done in the office.

2—A cutaneous biopsy is a "must" in the diagnosis of many neoplastic growths.

3—A cutaneous biopsy is an aid in the differential diagnosis of a large number of non-malignant dermatoses.

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Abstract of Mucoceles

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Chicago

On the basis of four cases seen in the clinics of the Illinois Eye and Ear Infirmary during the past nine months in which a diagnosis of mucocele was made this occasion is taken to briefly review this subject. From a careful study of the pathological material obtained from these cases we should like to present what we believe is a more understandable concept of mucocele formation.

The first case was that of a 66 year old white male who gave a history of a painless swelling over the left eye of four years duration. There was a marked downward and outward displacement of the left eye with vision of 20/200. A diagnosis of mucocele was made and confirmed by aspiration and x-rays. An external frontal operation was performed and the patient's post-operative course was uneventful.

The second case was that of 25 year old negro male who had noticed a drooping of the left eyelid and eye during the past year. There was a history obtained of repeated trauma to the left side of the head. A downward and outward displacement of the left eye was noted. A diagnosis of mucocele was made and confirmed by x-ray findings. An external frontal operation was performed and the patient's recovery was uneventful.

The third case is presented to bring out the difficulties of diagnosis of mucoceles. A 43 year old negress with all the classical findings of mucoceles, clinical and roentgenological, was operated through the external frontal approach but instead of a mucocele, a carcinoma was encountered. A radical exenteration of the left orbit was necessitated.

The fourth case was that of a 51 year old white male with complaints of pain over the right frontal and maxillary sinuses. X-rays of sinuses revealed a large rounded mass within the right antrum with slight haziness of the right frontal sinus. A roentgen diagnosis of mucocele of the right antrum and a mild right frontal sinusitis was made. Lipiodol studies of the right antrum confirmed the diagnosis of mucocele. A Caldwell-Luc operation was performed on the right antrum and the mucocele was removed. The patient's post-operative course was uneventful.

The diagnosis is based on a history of a painless progressive displacement of the eye in a downward and outward direction, diminished vision or diplopia, and trauma to the head in the past. The diagnosis is greatly facilitated by aspiration and x-ray.

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Presented before the 108th annual meeting, Illinois State Medical Society, Section on Eye, Ear, Nose and Throat, May 10-12, 1948.

The only adequate therapeusis seems to us to be a radical exenteration through an external incision. In cases of mucoceles of the frontal sinus an external frontal operation is recommended, while in cases of mucoceles of the maxillary sinus a Caldwell-Luc operation seems to be the one of choice.

It is generally held at this time that a mucocele is a cystic accumulation of fluid which undergoes active enlargement within a sinus causing atrophy of the surrounding bony structure. It is stated that this cystic accumulation may arise from a cyst formation in the lining membrane of the sinus or to the blocking of the sinus ostium as a result of trauma or infection.

However from the pathology found in our series it would seem that the mechanism of mucocele formation is initiated by: 1) a submucosal injury, either traumatic, hemorrhagic, or infectious, which causes an (2) elevation of the mucosa with an accumulation of exudate beneath it; and that (3) a herniation of this elevated mucosa occurs until it encounters the resistance of normal sinus mucosa of one of the sinus walls where (4) pressure is exerted upon the mucosa and the underlying bone.

The histo-pathology upon which this concept is based may be considered under (1) contents; (2) mucosal changes; and (3) bone changes.

The contents of the mucoceles are chiefly old blood elements, accumulations of red blood cells, and fibrous elements.

The etxernal mucosal changes consist primarily in a modification of the normal sinus mucosa. The normal cilia are absent and the columnar cells become cuboidal in type as a result of the pressure exerted by the developing mucocele. The inner wall of the mucocele is considerably thicker at the base where the initial injury occurred. It is composed of fibrous tissue and endothelial cells.

The changes of the adjacent bone are those characteristic of bones influenced by constant pressure and tension. In the beginning of the process, the pressure stimulates bone apposition and leads later, with an increase of pressure, to bone resorption which prevails above the first changes, giving the bone a thin parchment like appearance.

RECOMMENDS INSECT REPELLENTS TO VACATIONISTS IN TROPICS

Vacationists in tropical or subtropical areas would do well to have protective inoculations and learn about insect repellents, advises a Cincinnati dermatologist.

Several effective repellents have been developed in recent years, Dr. Leon Goldman of the University of Cincinnati College of Medicine points out.

During World War II, thousands of compounds were tested for their repellent and toxic qualities against mosquitoes, lice, mites, ticks and other such pests, he writes in the November issue of Archives of Dermatology and Syphilology.

"For insects which carry disease, such as ticks, mosquitoes and some flies, the repellents have an importance far beyond the prevention of the initial bite," Dr. Goldman says.

Duration of activity varies with the type of repellent, according to Dr. Goldman. A mosquito and tick repellent known as NMR1-448 is effective for about eight hours against mosquitoes and is said to be effective as long as 12 days against ticks. Clothing impregnation prolongs the period of activity.

As a repellent for chiggers, Dr. Goldman recommends benzyl or benzoate preparations which are used on the feet and legs. In general, a cream type of repellent is preferable to a liquid type, he says.

Mixtures of repellents developed by the armed services during World War II underwent controlled tests in regard to possible poisoning and irritation of the skin, he adds. As a result of such work, repellents available now are not likely to irritate the skin.

CASE REPORTS

Chronic Severe Ventricular Aneurysm

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A single, 49-year-old, white American female developed a sudden feeling of tightness in the chest that lasted 2 to 4 hours, and then subsided. A week later in the early afternoon while working as a file clerk she was suddenly siezed with a mild pain in the chest that gradually, over a period of 2 to 4 hours, became very severe, and radiated to both shoulders and arms. With the onset of the pain she became short of breath, and developed a profuse, cool perspiration; then, later, as the pain became more severe, the shortness of breath was more pronounced, and accompanied by nausea and vomiting of a moderate amount of a greenish-yellow mucoid material. She was brought to the hospital by ambulance, and given Pantapon gr. 1/3 for pain, Coramine 2 cc. IM, and placed under an oxygen tent in a sitting position.

Past History:—Patient was addicted to morphine, barbiturates and paragoric for the past ten years, had a shame, fear, frustration complex, and spent four months during 1947, undergoing shock treatment at a sanitarium for this condition. Patient stated that three years ago she had had a "mild stroke" without any residual effects, and further stated that she usually had low blood pressure. In December, 1945, she had a severe attack of chest pain accompanied with vomiting that lasted for two hours and then subsided to a dull constant ache that gradually left her after one month's rest. She did not consult a physician for this latter condition. Underwent an appendectomy and cholescystectomy in 1942 at the same time with an uneventful recovery. Pulmonary Tuberculosis in 1931, 1932. Menstrual history was essentially negative, and menopause took place six months ago.

Physical Examination:—A complete physical examination by systems was done, and was essentially negative except for the following: A well-nourished, well-developed, white female appearing about 45 years of age, mildly dyspneic, exhibiting slight cyanosis about the lips, appearing somewhat anxious, and perspiring quite freely with a temperature of 99.6 (rectal), respirations 24, pulse not palpable, blood pressure not

From the Jackson Park Hospital, Chicago.

obtainable by auscultation or palpation, heart tones distant, regular rhythm, and a mild, coarse, systolic murmur heard over the apex. Heart rate of 80 per minute.

Admitting Diagnosis:—Acute coronary occlusion.

Course of Disease:—About three hours after admission to the hospital, the patient's symptoms of pain, cyanosis, dyspnea and anxiety subsided, and she felt fairly comfortable though she was still orthopneic, and remained in a sitting position under the oxygen tent. The pulse of 84 per minute was very thready — weak, but regular, and the blood pressure was still unobtainable by auscultutory methods. The patient was given a sedative, and slept well for the rest of the night.

The following morning her temperature had risen to 100°R, and pulse rose to a regular, stronger 104 per minute with respirations at 24 per minute. She was comfortable; her Leucocyte count was 23,900 per cmm, and a nearly normal urine. BP was obtainable by auscultation, and read 100 systolic, 82 diastolic. An EKG was recorded and, concluded as "diagnostic of recent, acute, anterior, myocardial infarct. Sinus tachycardia, rate 125."

Throughout the hospitalization period EKG tracings were made. The conclusion interpreted from the early records was that of an acute anterior infarct, but as later tracings were taken the conclusions tended toward right heart damage and instability. The last recordings revealed very little other than premature auricular and ventriclar systoles.

On the third day following admission the patient's temperature was 103 R, pulse 120, respirations 25, BP was 86 systolic and 58 diastolic. The patient was comfortable, and had no complaints. The patient was being maintained on Pantapon gr. 1/3 PRN for pain and drug addiction for it was decided that any attempt at therapy for this latter condition could wait until a later date. Coramine 2 cc IM b.i.d. was also prescribed. The patient remained out of the oxygen tent for 2 to 3 hour periods, or as long as she showed no signs of respiratory embarrassment.

On the fifth hospital day her temperature had risen to 104.2 R, pulse 126, respiration 26, and penicillin IM was started more as a preventative

Figure 1. 1. Left Ventricular aneurysm and healed myocardial infarct. 2. Enlarged aortic valvular ring. 3. Marked thinning of myocardial wall.

of pulmonary complications than as therapy, for no physical findings of a lobar or bronchial infection were present. N.P.N. 32.5 mg. and sedimentation rate 34.

The temperature dropped slowly and erratically, reaching a normal level on the 24th day after admission, and remained within normal limits thereafter. The pulse did not follow the temperature changes, but varied between 140 per minute and 58 per minute — always weak, and most of the time regular regardless of its variance in range, until within a few days of expiration of patient, when it remained irregular. Respiratory rate varied between 12 per minute and 44 per minute, and did not follow the temperature or pulse curve very closely. At times it was increased because of anxiety for narcotics on the part of the patient. However, the rate remained quite constant for the last three weeks of hospitalization.

On the twelfth day following admission, patient began to show signs of edema about the ankles. This condition gradually increased in severity, and by the nineteenth day had involved the legs and hips, and there remained static in spite of drugs, and restriction of fluid intake. The patient was given mercurial diuretics, digitalis, cathartics, without effect, and her condition slowly became more grave, although there was no marked or dramatic change in the course of the condition. On the 65th day of hospitalization the patient expired, and post mortem was performed.

LABORATORY FINDINGS:

Blood

Date	10-31	11-11	11-19	12-6	12-16	1-3
Hemoglobin Haden						
Hausser	87%	84%	60%	84%	60%	63%
Erythrocytes per c. mm.	4,650,000	4,400,000	3,280,000	4,570,000	3,400,000	3,240,000
Leukocytes per c.mm.	23,900	20,200	17,700	14,400	10,100	10,900
Neutrophiles:						
Segmented	43%	75%	78%	73%	61%	69%
Bands	7%	5%	2%	3%	10%	6%
Lymphocytes	48%	18%	18%	21%	28%	24%
Monocytes	2%	2%	2%	3%	1%	

Urine

Date	10-31	11-11	11-20	12-3	12-6	12-31	1-3
How obtained	voided	voided	voided	voided	voided	voided	voided
Amount, single	X	X	X	X	X	X	X
Color	straw	straw	straw	straw	straw	straw	straw
Appearance	cloudy	cloudy	cloudy	clear	cloudy	clear	clear
Reaction	acid	acid	acid	acid	acid	acid	acid
Specific gravity	1.032	1.008	1.011	1.009	1.010	1.013	1.014
Albumin	trace	neg.	trace	trace	trace	plus 1	plus 1
Sugar	neg.	neg.	neg.	neg.	neg.	neg.	neg.
Casts	none	none	none	none	none	occas.	none
Pus cells/H.P.F.	8-10	1-3	16-18	2-3	12-15	8-10	6-8
Blood cells	rare	none	none	none	none	2-4	none
Epithelial cells	many	few	few	none	few	none	many

Autopsy:

Anatomical Diagnosis:—1. Massive healed myocardial infarct with aneurysm of the left ventricle.

2. Coronary occlusion.

3. Generalized arteriosclerosis.

Thoracic Cavity and Organs:—The left pleural cavity contains about 500 cc of blood-tinged liquid. The right pleural cavity contains many fibrous adhesions and about 200 cc of liquid. The pericardium is partially closed over the left ventricle by fibrous adhesions. The left ventricle is partially ballooned into the epicardium. The right heart is examined insitu, and no emboli are found. The heart weighs 370 grams. The epicardium over the anterior left ventricle is roughened. The myocardium of the right ventricle is red and 3 mm. in thickness. The right ventricle shows thickening of the muscle fibers. The left ventricle shows marked thinning over most of the entire ventricular wall, and is reduced to 2 mm. in some portions. The area involved here measures 10 x 6 cm. There is a clot over another portion of the left ventricular wall measuring 5.5 cm. in diameter. The left myocardium is of the expected thickness only near the mitral and aortic rings. The endocardium is markedly thickened over large portions of the left ventricle. The valves measure as follows in circumference: aortic-6 cm., mitral -11.5 cm., tricuspid-11 cm., and pulmonic-6.5 cm. The mitral valve shows atheromatous plaques. The aortic valve also shows these plaques. The coronary arteries show partially occluded lumens. The left descending coronary artery is completely occluded by atherosclerosis.

The aorta shows moderate atherosclerosis.

Microscopic Diagnosis:—Several sections of myocardium are examined. One through the intramural clot in the left ventricle shows layers of fibrin and amorphous material covering a thin band of muscle which shows coagulation necrosis. There is a small amount of viable fibrous and adipose tissue outside of the muscle. Other portions of the left ventricle reveal a markedly thickened fibrous endothelium with only occasional strands of muscle in the wall. There are areas of necrosis in the wall. There is round cell infiltration in the epicardium.

The sections of the left ventricle wall consist of an inner layer of fibrous tissue resembling a thickened aortic intima, outside of this is a thin layer of necrotic tissue to the distal side of which is a thin layer of fibrous tissue. This is followed by a narrow layer of cardiac muscle cells having large dark staining nuclei. Outside of this is a wide layer of epicardial fatty tissue with considerable perivascular inflammatory cell reaction.

Electrocardiograph Record
Conclusions

Date: 11-1-48. Conclusions: Diagnostic of recent acute anterior myocardial infarction. Sinus tachycardia.

Date: 11-8-48. Conclusions: T_6 flat; ST_5 more elevated; ST_6 no longer elevated; ST_4 less elevated; T_1 less tall. Unstable acute anterior infarction curve. Sinus tachycardia — 108.

Date: 11-22-48. Conclusions: Comparison with tracing of 11-8-48 reveals: Limb leads are practically identical. ST_4 is now horizontal and less elevated. ST_5 less elevated; T_5 small and inverted; Lead 6 unchanged.

The serial tracings do not show the expected evolution of an acute anterior wall infarct. This may be a state of chronic coronary insufficiency. *Recommend repeat tracing in a week.*

Date: 11-27-48. Conclusions: T_5 very slightly deeper. There are no other serial changes. The right heart strain persists. Marked myocardial damage.

Date: 12-6-48. Conclusions: The only changes noted is in T_5 which is no longer inverted. ST_5 is still elevated. The marked right heart strain pattern is still evident. There is a sinus rhythm (tachycardia) rate 110. Marked myocardial damage.

Date: 12-22-28. Conclusions: Comparison with the trace of 12-6-48 reveals the following serial changes: Numerous premature auricular and ventricular systoles are now present indicating marked increase in myocardial instability. The rate averages 110.

Date: 1-3-49. Conclusions: The number of premature ventricular systoles is markedly reduced indicating less myocardial irritability. A few are still present. There are no other serial changes. Sinus tachycardia — rate 125.

SUMMARY

A 49-year-old woman was admitted to the hospital with a diagnosis of acute coronary thrombosis. Throughout course of the disease no symptoms, physical findings, or laboratory procedures disclosed any evidence that was not compatable with the original diagnosis. The patient expired on the 65th hospital day, and an autopsy disclosed a severe, chronic aneurysm of the left ventricle with marked dilitation of the aortic valvular ring underlying a recent total occlusion of the left anterior coronary artery.

CONCLUSION

Report of chronic, severe, left ventricular aneurysm underling a case of fatal, acute, anterior coronary occlusion.

NAME OF HYGEIA, HEALTH MAGAZINE, CHANGED TO TODAY'S HEALTH

A change in name to *Today's Health,* effective with the March 1950 issue, was announced in the January *Hygeia,* health magazine of the American Medical Association.

The masthead of the January number also carried for the first time the name of Dr. W. W. Bauer, Chicago, as editor, succeeding Dr. Morris Fishbein, Chicago. Dr. William Bolton, Chicago, is the new associate editor, succeeding Dr. Bauer. Ellwood Douglass will continue as managing editor.

Hygeia was established by the American Medical Association in 1923. Written for the layman, it has come to be one of the most widely quoted health education periodicals in the United States. There will be no change in fundamental policy under the new editorship or new name.

Dermatomyositis

Bernard Shulman, M.D., Oak Park, and David Cohen, M.D.
Chicago

Dermatomyositis is a rare disease of unknown etiology. The tissues most involved are the striated muscles and secondarily, the skin. The disease may be acute or chronic. The overall mortality is about 50%. Many of the cases which do not die of the disease or its complications are crippled because of the extensive damage to the muscles. At present there is no proved effective treatment.

The patient, a 27-year-old white male of Greek extraction, was admitted to the hospital with the following history: He had been working for two and a half years as a die-setter; was married, and had two children. He had been in good health until six weeks before his admission to the hospital when he first noticed a progressive weakness in his arms. The weakness manifested itself particularly when he performed familiar tasks such as combing his hair or tying his shoelaces. Two weeks before admission his eyes and nose became swollen. A rash appeared on his eyelids, nose, cheeks, forehead, chest and hands. At the same time, he noticed an intolerance for solid foods, which seemed to go down to a point midway in his throat and then come up again. He took liquids well. Burning of the tongue and soreness in his throat appeared simultaneously. He lost fifteen pounds in six weeks, which he attributed to his inability to eat. He was seen by a physician a week before entry who gave him "pills" and injections of penicillin. He became suddenly worse with increasing muscular weakness and dysphagia, and was brought to the hospital.

The only significant finding in the history was a severe sunburn four months earlier.

Physical examination revealed a robust young white male lying quietly in bed. The temperature was slightly elevated, pulse 120 and bounding, and respirations 24. The patient was prostrate with marked weakness of the muscles of the neck, shoulders, and upper arms. He was most comfortable when lying flat on his back. There was an erythema with a crusted surface on the eyelids and on each side of the nose, giving a butterfly appearance. The face, especially the eyelids, was edematous. On the forehead just below the hairline, a similar patch of dry sharply L demarcated dermatitis was present. There was a cheilitis at both corners of the mouth. The ears and lips were of a deep red color. The eruption also involved the dorsa of the hands. Deep erythematous macules and papules with scales were present over the knuckles and at the bases of the fingernails.

The pupils were normal. The nasal mucosa showed a few blebs. The teeth were in fair condition. There were some sordes on the gums. The sides of the tongue were slightly reddened. The neck appeared swollen and was tender on palpation along the sternocleidomastoids which were flabbly and soft. Glands were felt in the neck. The lungs were clear; the heart normal in size and shape, without murmurs or irregularities. The blood pressure was 134 systolic over 80 diastolic. The abdomen, back and perineum were normal. Rectal examination was negative. The superficial reflexes were absent, and the deep reflexes could be weakly elicited with reinforcement.

On admission, the urine was clear, amber colored; with a pH of 6.5, specific gravity of 1.020, one hyaline cast, much mucus and urates. The hemoglobin was 81%, 4,370,000 red blood cells and 8,100 white blood cells per cu. mm., with 69 polys, 5 stabs, 22 lymphocytes, 3 monocytes and one eosinophil. The NPN was 34 mg. per 100 cc.

A diagnosis of acute disseminated lupus erythematosus was made.

Clinical course was rapidly downhill. The patient's muscular weakness became progressively worse and eventually involved all the muscles of his body. Marked edema developed in his face, neck, chest, arms and thighs; giving him a very husky appearance. The muscles continued to lose tone, and the patient had to concentrate all his efforts for even the slightest movement.

There was moderate muscular tenderness. There were no sensory disturbances. The dysphagia became worse so that eventually he was unable to swallow even liquids, because of regurgitation through his nose and resulting aspiration. He could speak only in a whisper and with great effort. He complained much of mucus running down the back of his throat. The pharynx became very edematous, the uvula markedly swollen. The dermatitis assumed a lighter color and a more chronic appearance. A blowing systolic murmur could now be heard over the whole precordium. The lungs became full of loud rhonchi. The whole chest reverberated to a forceful cardiac impulse. The respirations became rapid and shallow, the pulse faster. Blood pressure dropped to 118 systolic over 60 diastolic. His temperature, which at first varied from normal to 101°F, spiked to 103°F.

The urine became turbid and contained albumin (2 plus), much mucus, a few white blood cells and hyaline and granular casts. Shortly before death, the urine was loaded with bacteria and small round hyaline casts. The leucocyte count rose to 10,000 and then 12,500. There was no appreciable change in the differential count. Blood culture was negative. Serum calcium and phosphorus were 10.2 mg per 100 cc. and 4.2 mg. per 100 cc., respectively. Urine creatine was 58 mg. per 100 cc. on one determination. A urine culture taken a few days before death showed a non-hemolytic staphylococcus. At this time the hemoglobin was 64% and the red blood count 3,320,000. An x-ray of the chest, taken shortly after admission, was normal. EKG showed low voltage and tachycardia.

Dermatologic consultants suggested a dermatomyositis.

The patient began having considerable trouble in clearing his throat, bringing up quantities of frankly purulent material. He gradually became more dyspneic. Much mucus was evacuated from his throat in an attempt to relieve the condition. The pharynx and uvula were so swollen as to allow almost no passage for air. Eventually the patient became cyanotic and, despite aspiration of the trachea, morphine, atropine, and oxygen under positive pressure; became apneic and died suddenly on the sixteenth day of hospitalization. Muscle biopsy was advised but not obtained.

Treatment: Because of his inability to swallow, the patient was maintained by parenteral nutrients. Sedatives were given for sleep and rest. He was put on penicillin, 50,000 units every three hours, shortly after admission. Ephedrine sulfate was used locally from time to time in an attempt to shrink the redundant naso- and oropharyngeal mucosa. He was given a trial of intramuscular prostigmine methyl sulfate without benefit. Several injections of testosterone propionate were given without noticeable effect.

Post-Mortem Examination:—The body was that of a well-developed white man of about twenty-seven years of age. The conjunctival and oral mucosa were pale. The skin around the mouth was fissured. The neck was swollen, but no glands were felt. The arms showed a marked non-pitting edema. The abdomen was flat, with an old McBurney scar. The skin lesions appeared faded.

The liver was at the xyphoid and at the 8th rib in the midaxillary line. The lower pole of the spleen was at the 10th rib in the midaxillary line. The diaphragm was at the 3rd intercostal space on the right, 4th intercostal space on the left. The peritoneum was normal.

The left pleural cavity contained 100 cc. of a clear amber fluid; the right side about 200 cc. The pleura and the pericardial sac were normal. The heart weighed 310 Gms. The myocardium was red-brown and flabby, with L.V.-15 mm. and R.V.-only 2 mm. All valve leaflets were normal. The intima of the aorta was smooth.

The upper lobe of the left lung was subcrepitant with a frothy, bloody fluid in the air passages. The lower lobe of the left lung was dark red and full of blood, as was the lower lobe and whole posterior half of the right lung. The bronchi were diffusely dilated with an injected mucosa and lumina full of thick creamy pus. The hilar lymph nodes were enlarged, firm and anthracotic.

The spleen weighed 360 Gms., was moderately enlarged with a firm thick capsule. On section, it was dark purple-red with enlarged and prominent follicles. The liver weighed 2100 Gms. and was firm with a thin smooth capsule. On section, the markings were moderately distinct and the color tan-brown. The gall-bladder was distended with thick dark bile.

The weight of both kidneys was 460 Gms. They were firm; the capsules stripped with ease. The surfaces were smooth and of a pink-purple color. The pelves and ureters were normal. The urinary bladder was slightly dilated with mucosal injection in the area of the trigone.

The jejunum was normal. The Peyer's patches in the ileum were hyperplastic. The mucosa of the cecum and ascending colon contained many single lymph follicles, while a few areas in the ascending colon and terminal ileum had pinpoint ulcerations.

All the other internal organs were within normal limits.

The skeletal muscles were uniformly soft and edematous. Areas of pallor from 1-5 cm. in diameter were distributed diffusely throughout the muscles. The subcutaneous tissues showed marked edema.

Microscopic examination of the skeletal muscle revealed edema, loss of striations, hyaline degeneration and fragmentation of the muscle fibers. In some places there was complete destruction and replacement with fibrous tissue. A small amount of perivascular round cell infiltration was present.

Section of the heart showed edema of interstitial tissue with some fibrosis, degeneration and fragmentation of the muscle. Sections of the liver and kidney showed cloudy swelling and passive congestion. Section of a peribronchial lymph node revealed only small amounts of anthracotic pigmentation, hyperemia and a marked non-specific hyperplasia.

Section of the skin showed a marked edema of the dermis and subcutaneous tissue with slight perivascular infiltration of mononuclear cells.

COMMENT

Dermatomyositis was described by Steiner[1] as "an acute, subacute or chronic disease of unknown origin; characterized by gradual onset with vague and indefinite prodromata, followed by edema, dermatitis and multiple muscle inflammation". Several reviews of the literature have appeared since Steiner[2]. In 1938, Schuermann[3] claimed to have found 263 cases. We have found reported cases since that time, not all of which were proved cases or satisfied the diagnostic criteria of most authorities[4].

The etiology of the disease has at various times been thought to be bacterial, viral, toxic, hormonal, hyperergic or a combination of two or more of these factors. At times its close similarity to scleroderma[5] or to disseminated lupus erythematosus[6] may classify it among the collagenoses, although the collagenous tissue in dermatomyositis does not undergo such extensive changes as it does in the other diseases[7]. The disease, has in several instances, been noted in connection with preceding infections[8] and carcinoma[9]. Sensitivity to sunlight has been reported on several occasions[10] and may have been a factor in our case.

It is possible that dermatomyositis is a somatic response to one or more of a number of possible provoking factors. Transitional cases resembling lupus erythematosus and scleroderma have been reported in which even biopsy was confusing[11]. There is much disagreement concerning the pathologic picture of the disease. Many muscle specimens have shown only non-specific inflammatory or degenerative changes[12]. These resemble changes found in several other myopathies such as severe scleroderma, myasthenia gravis, thyrotoxicosis, etc.[13]. Others feel that dermatomyositis has a typical lesion[14] consisting of an interstitial infiltration of lymphocytes and monocytes, probably followed in time by parenchymatous muscle changes of a non-specific type due to a toxin, anoxia or both. The name "edematous polymyositis" is preferred by the French investigators[15], since they feel that the skin manifestations are secondary. Mills[16] considers the skin lesion to be a "toxic dermatitis". He reported a case in which biopsy preceded autopsy by two weeks. The biopsy showed chiefly an interstitial inflammatory reaction with little degeneration, while autopsy revealed marked parenchymatous degeneration with only moderate infiltration. O'Leary[17] also considers the skin lesions secondary. Wainger and Lever[18] believe that degeneration of muscle and collagen is the basic morphologic alteration in this disease.

Histologic examination is necessary to distinguish between dermatomyositis and trichiniasis, scleroderma, lupus erythematosus and periarteritis nodosa. Conditions which enter the differential diagnosis but can be differentiated clinically are giant urticaria, serum sickness, scleredema adultorum, myasthenia gravis, rheumatic fever and sometimes trichiniasis.

A long list of drugs has been used in this disease without benefit to the sufferers. Some

of them are: quinine, arsenic, calcium, autogenous vaccines, salicylates, urotropin, thyroid, prostigmine, ephedrine, guanidine, oxygen, sulfonomides, penicillin, and anti-histaminics. The tocopherols have given temporary benefit in some cases[19]. Testosterone has recently been suggested[20]. Para-aminobenzoic acid is the latest addition to the list[21]. [We know of one case of dermatomyositis in which para-aminobenzoic acid was given without benefit, but we feel, because of the short duration and small dosage involved in the treatment of this case, that the results were inconclusive.]

SUMMARY

A case of acute progressive dermatomyositis with dermatitis and edema is presented. Autopsy revealed only non-specific muscle degeneration, edema of subcutaneous tissues and skin, inflammation and degeneration of the myocardium, and congestion of all the viscera.

The recent theories of the etiology and pathogenesis are reviewed.

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NEWS OF THE STATE

CHAMPAIGN

County Society Elects Officers—To Publish Bulletin.—Dr. G. F. Fishel, Tolono, was chosen president-elect of the Champaign County Medical Society at a meeting, December 8, and Dr. C. H. Drenckhahn was inducted into the presidency, succeeding Dr. J. C. Dallenbach. Dr. A. H. Leavitt was chosen secretary-treasurer, a position he has been filling since the recent death of Dr. J. J. Westra. Executive committee members named for three years are Drs. I. Brill and G. Calvin Williamson; for one year, Dr. C. T. Moss Jr. At the meeting it was announced the society will publish a 16 page printed bulletin, to be known as the Champaign County Medical Bulletin. The new publication will replace the previous mimeographed bulletin, "Sawbones Reporter," and will be issued monthly except July and August. It will be released the first Thursday of each month.

COLES

Personal.—Dr. Guy O. Pfeiffer, otolarynologist of Belleville, has removed to Mattoon where he has become associated with the Link Clinic.

COOK

Staff Election.—Dr. John J. Fahey, Skokie, was chosen president of the medical staff of St. Francis Hospital, Evanston, succeeding Dr. A. Konle. Dr. James X. Bremmer and Dr. R. M. Jones were reelected vice president and secretary-treasurer, respectively.

N. U. Receives $100,000 from Dr. Anna Lapham.—Northwestern University has received a gift of almost $100,000 from Dr. Anna Ross Lapham, first woman professor of the University's Medical School. Dr. Lapham, who is an assistant professor of obstetrics, emeritus, presented the gift to the department of obstetrics and gynecology to be used for research, scholarships and loans.

Dr. Lapham, who received her M.D. cum laude from Northwestern in 1898, joined the Medical School faculty in 1919 and was given her present emeritus rank in 1946. For many years she assisted the late Dr. Joseph B. DeLee, well-known obstetrician and founder of the Chicago Lying-In hospital. She has delivered more than 10,000 babies in her years of medical practice.

Construction Continues on West Side.—Another important project in the expansion program of the Medical Center District on Chicago's near West Side has been undertaken with the start of construction of a 14-story addition to the University of Illinois Research and Educational Hospitals.

Erection of the 411-bed teaching hospital represents one of the largest construction projects in the history of the University of Illinois. Construction contracts alone total $5,368,628.

State funds totaling $5,559,929 have been released by Governor Stevenson for the project.

It is anticipated that the building will be enclosed within a year, and that general work will be completed within 18 months.

Start of work on the addition to the University's Research and Educational Hospitals will raise the amount of present construction in the Medical Center District to more than $25,000,000. Other projects now under construction are the Veterans Administration Hospital, the Chicago State Tuberculosis Hospital, Cook County Interns' Residence, and the Nurses' Residence at Presbyterian Hospital.

In addition to providing facilities for 411 patient beds, the hospital addition will enable the University to handle more efficiently its clinic patients. More

than 7,000 patients received bed treatment at the Research and Educational Hospitals during the past fiscal year, while an additional 189,000 visits were handled in the 24 outpatient clinics.

Lectures for Alumni.—In cooperation with Mount Sinai Hospital, the Chicago Medical School will present a Post-Graduate Lecture series for alumni, and for others who may be interested. The lectures will be held in the Kling Auditorium of Mount Sinai Hospital, 15th Place and California Ave., Wednesdays, at 8:00 P.M.

Jan.	11	Acth and Cortisone — Their Promise and Limitations	Dr. R. Levine
	18	Use and Abuse of Hormones in Obstetrics and Gynecology	Dr. A. E. Kanter
	25	Recent Advances in Cardiology	Dr. Aldo Luisada
Feb.	1	Recent Contributions to The Cancer Problem	Dr. Kurt Stern
	8	Diagnosis of Common Peripheral Vascular Disorders	Dr. David I. Abramson
	15	Recent Advances in Therapy of Peripheral Vascular Disorders	Dr. David I. Abramson
	22	Recent Advances in Therapy of Blood Diseases	Dr. Steven O. Schwartz
March	1	Diagnosis of The Psychiatric Patient by The General Practitioner	Dr. Harry H. Garner
	8	Management of The Psychiatric Patient in General Practice	Dr. Harry H. Garner
	15	Early Recognition and Treatment of Emergencies in The Newborn	Dr. Maxwell P. Borovsky

Dr. Leo M. Zimmerman is Chairman of the Committee for Post-Graduate Seminars. He is assisted by: Drs. Maxwell P. Borovsky, Harry H. Garner, David Willis, Peter Gaberman, Piero P. Foa, Irving Siegel, Sidney R. Bazell, Henri DuVries, Frank Lawler, and Emily Svoboda.

Personal.—*Dr. Walter J. Reich recently discussed "Current Trends in Gynecology" before the First District of the Ontario Medical Society in St. Thomas, Canada. — "Surgery of the Colon" was the title of a talk given by Dr. Philip Thorek, December 8, before the Brown-Door-Kewaunee Medical Society in Green Bay, Wisc.*

DOUGLAS

Society Election.—Dr. Grant Jones, Arthur, was elected president of the Douglas County Medical Society at its December meeting, succeeding Dr. E. M. Tannis, Villa Grove, who was filling out the unexpired term of Dr. E. Kahan, Hindsboro, who moved to New York. Dr. Philip Deaver, Tuscola, was elected vice president, and Dr. E. S. Allen, Arcola, was reelected secretary-treasurer.

JACKSON

Personal.—Dr. E. L. Borkon, Carbondale, was elected president of the Holden Hospital staff, November 23. Other officers are Dr. Dan Foley, vice president and Dr. Ellis Crandle, secretary.

Regional Programs for Health, Recreation and Physical Education.—The Carbondale Herald recently announced that Southern Illinois University is considering inaugurating a three-way program on health, recreation and physical education. The tentative outline suggests establishing adequate recreational facilities for University students, a broad curriculum of training for teachers in recreation, physical education and health and a set up to provide camping education for children of Southern Illinois in cooperation with public schools. Dr. Carl N. Reilly, Marion, was recently appointed director of the health service at Southern Illinois University, succeeding Dr. Marie A. Hindrichs, resigned.

KNOX

Physicians Telephone Exchange Opened.—The Galesburg Physicians Telephone exchange was opened recently. Special equipment has been set up by the Intra State Telephone Company in the home of Mrs. A. W. Stephenson, 518 East Fifth Street, whereby she will handle calls twenty-four hours a day for local physicians.

LEE

Personal.—Dr. Clara Johns, health officer of Lee County, has resigned to become a clinical fellow at the Massachusetts General Hospital in Boston. Dr. Johns, a native of Rockford, has been in Lee County since 1946 and was recently made a diplomate of the American Board of Preventive Medicine and Public Health. At the quarterly meeting of the Lee County Board of Health, Dr. Gene Sullivan, a member of the board since it was organized three years ago, was elected president.

MC DONOUGH

St. Francis Staff Chooses Officers.—Dr. W. W. Holland was elected president of the St. Francis Hospital staff, Macomb, December 15, succeeding Dr. V. D. Adams. Dr. R. L. Franck, Bushnell, was named vice president to succeed Dr. Holland, and Dr. Eric E. Wisshack was reelected secretary-treasurer. Dr. Bruce A. Borum, Blandinsville, was elected as a new member of the executive committee, succeeding Dr. S. F. Russell, and Drs. W. M. Hartman and A. P. Standard were reelected to the executive committee.

MACON

Personal.—Dr. Everett S. Fagle, Decatur, was appointed county physician at an annual salary of

$900. He succeeds Dr. Ferris D. Highsmith who held the position for two years but who was not an applicant for reappointment.

Hospital Staff Chooses New Officers.—Dr. Dwight Pence was elected president of the Decatur and Macon County Hospital staff, December 15, Dr. James Waller, vice president, and Dr. Herbert Bavor, secretary-treasurer.

New Officers for Macon County.—Dr. Hyman J. Burstein, Decatur, has been chosen president of the Macon County Medical Society, succeeding Dr. V. M. Long. Other officers are Dr. D. F. Loewen, vice president and Dr. Ferris D. Highsmith, treasurer. Dr. Maurice D. Murfin, Decatur, was reelected secretary and reappointed alternate delegate to the Illinois State Medical Society. Dr. Arthur F. Goodyear was reelected delegate.

MADISON

Staff Election.—Dr. G. A. Rawlins was elected president of the medical staff of St. Joseph's Hospital at a meeting, December 13, succeeding Dr. Leo Konzen, Wood River. Dr. James McCloskey, was named vice president and Dr. Henry Halley, secretary-treasurer.

MARION

Society Election.—Dr. H. E. Snow, Centralia, was chosen president of the Marion County Medical Society at a recent meeting. Dr. E. F. Stephens was named vice president, and Dr. Jack Frost, secretary-treasurer.

MENARD

Dr. Moulton Fifty Year Member.—The Menard County Medical Society gave a dinner, November 23, to honor Dr. H. P. Moulton, Petersburg, and to mark his completion of fifty years in the practice of medicine. Dr. B. D. Epling, president of the society, presided. Dr. Moulton was presented with the insignia representative of his membership into the Fifty Year Club of the Illinois State Medical Society; the presentation was made by Dr. Ralph Peairs, Normal.

PEORIA

Physician Publishes Book.—Dr. Charles G. Farnum, Peoria, has had his first book published by the Exposition Press of New York. According to the Peoria Journal Transcript, Dr. Farnum's book, "Medicine Could Be Verse," is a collection of humorous poems which encompasses "pathological sonnets", "quarrelsome quatrains", and "cynical cinquains". Dr. Farnum is a former president of the Peoria Medical Society. His poems have appeared in the ILLINOIS MEDICAL JOURNAL and other medical publications.

Financial Gift to Methodist Hospital.—The Caterpillar Tractor Company has given $200,000 to the Methodist Hospital to finance the cost of constructing a new fourth floor of the hospital proposed five floor wing.

ROCK ISLAND

Personal.—Dr. Jane W. McMullen, Moline, has been named supreme physician of Royal Neighbors of America, filling the vacancy of the recent death of Dr. Hada M. Carlson, Moline, who held the position for twenty-eight years.

Woman Physician Chosen Outstanding Practitioner.—Dr. Phebe Pearsall was chosen outstanding general practitioner in Rock Island recently. Dr. Pearsall's married name is Mrs. Conrad C. Block.

ST. CLAIR

Staff Election.—Dr. Vivien P. Siegel, Belleville, was elected chief of the medical staff of St. Mary's Hospital, East St. Louis, succeeding Dr. E. W. Cannady. Other officers are Dr. Owen Eisele, vice president; Dr. Louis Kappel, secretary; Dr. H. J. Nebel, treasurer. One year terms as members of the executive committee will be served by Dr. Cannady, Charles F. Alderson and Kilian F. Fritsch Jr.

SANGAMON

Golden Wedding Anniversary.—Dr. and Mrs. T. F. Hill, Athens, recently observed their fiftieth wedding anniversary, all of which time has been spent in Athens, where Dr. Hill started practicing following his graduation at Rush Medical College. The physician has served as mayor of Athens, president of the board of education and is currently president of the Athens State Bank. He is a member of the Fifty Year Club of the Illinois State Medical Society. A son, Dr. Harold H. Hill, a commander in the navy medical corps, is stationed at the U. S. Naval Hospital, San Diego, as chief of the department of obstetrics and gynecology.

Fifty Years of Medicine.—Three members of the Sangamon County Medical Society were inducted into the Fifty Year Club of the Illinois State Medical Society at a recent meeting. Pins and certificate, emblematic of the honor, were presented to Dr. Walter S. Taylor and Dr. Arthur L. Hagler. Dr. Fred S. O'Hara, who was not present because of illness, was represented by his son, Dr. G. H. O'Hara. All three honored physicians reside in Springfield.

SHELBY

Dr. Cherry Honored.—At a regular meeting of the Shelby County Medical Society in Shelbyville, December 12, Dr. Thomas E. Cherry, Cowden, was presented with the insignia marking his acceptance into the Fifty Year Club of the Illinois State Medical Society. The presentation was made by Dr. C. H. Hulick, Councilor of the Seventh Councilor District.

STARK

Woman Physician Enters Fifty Year Club.—Dr. Alma Trimmer Wead, Wyoming, has been presented with the pin and certificate signifying membership in the Fifty Year Club of the Illinois State Medical

Society. Dr. Wead, and her husband, the late Dr. James Wead, and their oldest son, Dr. John T. Wead, were at one time associated in practice.

VERMILION

Society Election.—Dr. Richard Heaton, Hoopeston, on December 6 was elected president of the Vermilion County Medical Society succeeding Dr. Holland Williamson, Danville. Dr. O. J. Michael was named vice president and Dr. E. T. Baumgart was reelected secretary-treasurer.

WARREN

"Today's Personality."—The Monmouth Daily Review-Atlas, December 24, featured Charles P. Blair as "Today's Personality." The story reviewed Dr. Blair's career, pointing out that since his graduation at the University of Illinois College of Medicine, Chicago, in 1911 he had been active in civic and medical affairs, having served as a member of the Monmouth Board of Education from 1918 to 1946, and for a part of that period as secretary. Dr. Blair is a former member of the senate of Monmouth and numerous clubs. He served as secretary of directors of the Second National Bank of Monmouth. He served as secretary of the Warren County Medical Society from 1928 to 1946, is Councilor of the Fourth District of the Illinois State Medical Society and, among other positions in the state society, is Chairman of its Educational Committee. Dr. Blair's hobby is flying kites, many of which he makes himself. He is also a model railroad fan. The selection of Dr. Blair in local papers marked the third appearance of the new column.

WILL

Eighty-Five Years of Age.—Dr. Grant Houston, Joliet, was guest of honor recently at a dinner, given by his grandson, Dr. James D. Rogers, also of Joliet, to celebrate his eighty-fifth birthday. Dr. Houston has practiced in Joliet for more than fifty years.

GENERAL

Polio Team Formed.—Dr. Roland R. Cross on January 12, announced the formation of the Illinois State Polio Planning Committee, composed of members of all agencies dealing with diagnosis and treatment of this disease.

This committee, which has been formed at the request of Governor Adlai E. Stevenson, has as its purpose the coordination of the efforts of the various agencies in diagnosing and giving medical care to polio patients. The members of the committee will attempt to formulate procedures which will do away with duplication of services to polio victims and will enable these persons to get more complete and earlier care.

Members of the committee include Dr. Roland R. Cross, state director of public health, chairman; Dr. Harold M. Camp, Monmouth, secretary of the Illinois State Medical Society; A. Eugene Miller, Springfield, Illinois state relations officer of the American Red Cross; Dr. Herbert Kobes, Springfield, director of the state division of Services for Crippled Children; Miss Ruth Kirk, Sterling, president of the Illinois State Nurses Association; Andy Glosecki, Springfield, Illinois state representative of the National Foundation for Infantile Paralysis; Leo Lyons, Chicago, president of the Illinois Hospital Association; Rodney H. Brandon, Chicago, Illinois chairman of the Sister Elizabeth Kenny Foundation; Miss Ann Prochazka, Chicago, secretary, Illinois division of the American Physical Therapy Association, and Dr. Leonard M. Schuman, chief of the state division of communicable diseases.

HEALTH DEPARTMENT ACTIVITIES

Governor Appoints Health Advisers.—Governor Stevenson recently appointed the following persons to the board of public health advisers of the Illinois State Department of Public Health: Dr. Everett P. Coleman, Canton; Dr. James H. Hutton, Chicago; Dr. Edward Piszczek, Chicago; Lloyd H. Dodd, D.D.S., Decatur and Edison Dick, Lake Forest.

Annual Report on Health.—Summarizing the 1949 activities of the state department of public health, Dr. Roland R. Cross, director, on December 28, termed the year as outstanding in accomplishments.

"In addition to our long established services, several new and essential programs have been inaugurated and other functions advanced to the organizational stage," he said.

"Favorable legislation has permitted us to extend our activities in many important fields. An extension of state aid for local hospitals, the seperate appropriation for state tuberculosis hospital construction, strengthening of the sanitary water board's powers and needed changes in the law concerning local referendums on county health department formation have materially aided our program."

Dr. Cross related that in 1949 Illinois put into operation the most widespread tooth-saving program of any state in the nation. The health department's dental x-ray service has been expanded to provide more than 100,000 x-rays yearly. Four teams of dental experts will complete about 35,000 applications of decay-preventing sodium fluoride to the teeth of Illinois school children by the end of the 1949-50 school year.

Under a newly organized program of diagnosis and treatment of heart diseases, begun in July of this year, four projects, located in Springfield, Rockford, East St. Louis and Savanna are already functioning. The growing program of study and treatment of mental diseases has also been intensified this year.

"The additional appropriation for state aid to local hospital construction, made by the 66th General Assembly, is enabling us to more nearly approach our goal of adequate hospital facilities for the entire state. With the completion of the program which is now underway, the state, federal and local funds will combine to provide an additional

1,350 hospital beds to our present seriously inadequate hospital picture," Dr. Cross stated.

Likewise, progress in the development of county health departments, which are encouraged by the state health department, has been substantial this year, he told. Twenty-four counties are now covered with locally administered health departments, with two departments, in JoDaviess and Jackson counties, being developed during 1949.

"Although the program of assistance to premature infant centers is not new, we are proud of the record of this function during this year. More than 740 babies have been received at the three downstate centers this year and were given required special attention that most hospitals are unable to provide," Dr. Cross said.

The state's tuberculosis case finding program, carried on primarily through the use of mobile x-ray units which travel from community to community, has been of service to some 280,000 Illinois citizens during this year.

"It is largely due to this extension tuberculosis case finding program that Illinois' reported cases of tuberculosis have risen slightly this year," Dr. Cross said. "These units, which are going into every area of the state are finding many previously undiagnosed cases of this disease, which are in the early and more easily curable stages."

Since the first of the year, three new cancer clinics have been opened, bringing the total of such diagnostic centers to 24 within the state, operating with the assistance of the state department of public health, he told.

In these clinics, 4,150 patients were given first examinations in 1949, 4,802 received follow-up examinations and tissue examinations for 3,763 indigent patients were made.

Dr. Cross characterized this venture as "our first line in the fight against this complex and serious disease."

"In spite of the heavy incidence of polio during the past summer, the number of cases of reported communicable diseases remained substantially the same as last year," Dr. Cross reported. "Most of of these diseases, particularly the more serious ones such as typhoid fever, diphtheria and small-pox have been diminished to the point that we can point with pride at experiencing no increase in their prevalence.

"The death rate, from all causes, which last year was the lowest in Illinois history continued to decrease slightly this year. This is, I believe, the strongest kind of indication that the efforts of this department are affecting the life of nearly every person in this state," he concluded.

DEATHS

JOHN STANLEY COULTER, Chicago, who graduated at the University of Pennsylvania School of Medicine, Philadelphia, in 1909, and at the Army Medical School, Washington, D. C., in 1911, died in his home in Westville, Ind., December 16, aged 64, of cerebral hemorrhage. He was for many years chairman of the Council on Physical Medicine and Rehabilitation of the American Medical Association; treasurer and president of the American Congress of Physical Medicine, which in 1943 awarded him the gold key of merit; and he served on the advisory committee of the Parmly Foundation for Auditory Research. He was chairman of the department of physical medicine at Northwestern University Medical School.

JOHN PETER DENBY, retired, Carlinville, who graduated at Marion-Sims College of Medicine, St. Louis, in 1898, died in his home, December 16, aged 79. He was president and director of the Farmers and Merchants Bank, Carlinville, at the time of his death.

FRANK H. GARDNER, Moline, who graduated at the University of Illinois College of Medicine in 1893, died in his home, December 1, aged 85. He had received a degree in pharmacy from the same University in 1884.

ASCHER H. C. GOLDFINE, Chicago, who graduated at the Chicago College of Medicine and Surgery in 1913, died while attending a patient at a hospital, December 29, aged 63. He was associate professor of the department of obstetrics and gynecology at Loyola University School of Medicine from 1914 to 1942.

WILLIAM JACOB HARNED, Charleston, who graduated at St. Louis University School of Medicine in 1916, died in his home, December 8, aged 67. He began the practice of medicine in Charleston in 1936.

SHELDON A. JACKSON, Olney, who graduated at the Chicago Medical School in 1936, died following a short illness, December 11, aged 42. He was the owner of the Jackson Hospital, Olney; in 1948 he was president of the Richland County Medical Society.

HOWARD STEWARD MAUPIN, Quincy, who graduated at the University of Illinois College of Medicine in 1914, died in his home, December 17, aged 59. He was a member of the staff of the Blessing Hospital, Quincy, and served as physician for Woodland and Cheerful Homes.

KATHERINE MARTHA MAYER, Chicago, who graduated at Rush Medical College in 1917, died December 15, aged 63. She was attending pediatrician at Children's Memorial and Evangelical Hospitals.

ANDREW D. MILLER, Sullivan, who graduated at Missouri Medical College, St. Louis, in 1891, died December 7, aged 85. He had practiced medicine in Sullivan more than 50 years and served three terms as mayor.

JOHN JOSEPH NOLAN, Oak Park, who graduated at Northwestern University Medical School in 1904, died December 16, aged 71. He had practiced medicine in Oak Park for 35 years.

ERWIN JOHN RUECK, Gifford, who graduated at Chicago College of Medicine and Surgery in 1913, died at Paxton Hospital, December 5, aged 63. He had practiced medicine 8 years at Thawville, 10 at Roberts and 15 at Gifford.

GEORGE H. SOMERS, Chicago, who graduated at University of Wooster, Medical Department, Cleveland, in 1890 and Long Island College of Medicine, Brooklyn, in 1891, died December 31, aged 91.

ALLAN EDGAR STEWART, retired, Chicago, who graduated at Queen's University, Faculty of Medicine, Kingston, Ontario, in 1898, died recently, aged 76; formerly chairman of the surgical department of Loretto Hospital.

WILLIAM MOORE THOMPSON, retired, Chicago, who graduated at the Chicago College of Medicine and Surgery in 1909, died December 4, aged 71.

THOMAS GALE WALLIN, Chicago, who graduated at Bennett College of Eclectic Medicine and Surgery in 1913, died January 4, aged 64.

HERBERT LEWIS WILLIAMS, Bartonville, who graduated at Northwestern University Medical School in 1909, died January 5, aged 66.

"FOR THE COMMON GOOD"

Interest in Televised Health Talk Continues.—On December 6, Jack Mabley of the Chicago Daily News mentioned the weekly health telecasts of the Educational Committee of the Illinois State Medical Society entitled Health Talk as one of the outstanding programs on television. Don Foster in the Chicago Sun-Times, December 28, titled his column "TV Here to Stay", devoting the story to "Health Aspects of Television", reproducing the **Health Talk** of the Committee. Larry Wolters, in the Chicago Tribune December 28, also featured the story.

The Medical Association of Georgia planned to open its 1950 heart campaign on television in February, using the script of the fluoroscopic demonstration developed by the Committee and carrying credit to the Illinois State Medical Society for establishing this "first" on television.

The Indiana State Medical Association also has shown interest in the telecasts of the state medical society, as has Harvard University School of Public Health.

Spencer Allen of WGN-TV, one of the principal speakers at the conference for press and hospital representatives during the American College of Surgeons recently stated that other groups would do well in emulating the leadership of the Illinois State Medical Society in promoting health education via television.

"The Common Cold" was televised December 14, with Clayton G. Loosli of the University of Chicago School of Medicine. Visual emphasis was given by a patient, slides and movie.

"Care of the Premature Infant" was the title of the telecast, December 21. Participants were Herman N. Bundesen, President of the Chicago Board of Health, and Beatrice Hover, R.N., of his staff. Portable equipment for the care of the infant was taken to the studio. A premature infant, aged 5 weeks, was featured. Utensils and layette of the premature infant were shown.

"Burns" was televised, December 28, with Harvey S. Allen of Northwestern University Medical School. Patients, slides and blackboard demonstrations enhanced the visual demonstration.

"Getting Ready for School" was the title of the Health Talk telecast, January 4, with Eugene T. McEnery of Stritch School of Medicine of Loyola University. Patti Rae Chartrand, aged 6, was given a physical examination. The Illinois Society for the Prevention of Blindness cooperated in this telecast by making the visual chart available. In the examination Dr. McEnery emphasized the need of an examination by the dentist. The new school health blank of the Chicago and Illinois medical societies was featured, as well as the cooperation of the Chicago Board of Education.

"Hobbies for Health", January 11, was highlighted with an interview by Dr. Andy Hall, Mount Vernon, outstanding general practitioner of the year. Kenneth Scatliff introduced Dr. Hall, and physicians showing and discussing their hobbies were Harold M. Camp, fishing; Leo Zimmerman, wood-carving; Walter Priest, music; Jacques Smith, leather work, Ben Rappaport, painting.

Theodore R. Van Dellen, Assistant Dean, Northwestern University Medical School, and Medical Editor of the Tribune, acts as moderator on Health Talk telecast.

Lectures Arranged Through the Educational Committee of the Illinois State Medical Society:

F. Garm Norbury, Jacksonville, Chandlerville Woman's Club in Chandlerville, January 2, on Your Mental Health.

Ralph Hamill, Ravenswood Civic League in Chicago, January 6, on What Mental Hygiene Should Mean To You.

Paul K. Anthony, Mothers Club, Emerald Avenue Presbyterian Church, January 17, in Chicago, Understanding the Adolescent.

Adrian D. M. Kraus, Gallistel School PTA in Chicago, January 18, on Understanding Your Child.

Mr. Robert Krit, Illinois Division, American Cancer Society, North Avenue Larrabee YMCA in

Chicago, January 24, film "Traitor Within" and Cancer Control in the Individual.

Carl W. Christensen, Evanston, Antioch High School Social Organization, February 7, in Antioch, The Adolescent Rebellion.

Robert M. Kark, Woman's Auxiliary, Chicago Medical Society, February 14, on Present Trends in Nutrition Research.

Israel Sonenthal, South Bryn Mawr Wednesday Club, in Chicago, March 8, Mental Health.

Paul H. Wosika, Palos Park Woman's Club in Palos Park, March 9, on Understanding Your Heart.

Ralph Hamill, Phillip Rogers PTA in Chicago, March 13, narrator of film "Feeling of Hostility".

Mr. Louis de Boer, Mental Hygiene Section, Illinois Federation of Woman's Club, March 13, in Chicago, Recommendations of the Children's Commission of the Illinois Society for Mental Hygiene.

Carl W. Christensen, Evanston, Mundelein PTA in Mundelein, March 13, on Your Emotions and You.

Joseph T. O'Neill, Ottawa, Marseilles Jr. Woman's Club, March 14, on Health.

Ford K. Hick, Woman's Auxiliary, Chicago Medical Society, March 14, on Your Annual Physical Examination.

Morris Braude, Gage Park Woman's Club in Chicago, March 28, Mental Hygiene — Meaning, Scope and Prospects.

Joseph T. O'Neill, Ottawa, Garfield School PTA in Streater, March 23, on Sex Instruction.

Lectures Arranged Through the Scientific Service Committee of the Illinois State Medical Society:

Louis R. Limarzi, Kankakee County Medical Society in Kankakee, January 10, on Current Management of Common Blood Disorders, illustrated.

Everett P. Coleman, Canton, Logan County Medical Society in Lincoln, January 19, on Diagnosis and Treatment of Acute Surgical Conditions of the Abdomen.

Max Sadove, Chicago, Iroquois County Medical Society in Watseka, January 17, on Recent Advances in Anesthesia.

James H. Hutton, Chicago, McDonough County Medical Society in Macomb, January 27, on Diagnosis and Treatment of Obesity.

Eugene A. Hamilton, Chicago, Whiteside-Lee Counties Medical Society in Rock Falls, February 9, Fracture of the Shaft of the Femur, illustrated.

William F. Lauten, Chicago, McDonough County Medical Society, February 24, in Macomb, Surgery of the Hand, illustrated.

Harvey S. Allen, Chicago, Whiteside-Lee Counties Medical Society, March 9, in Rock Falls, Treatment of Burns.

J. P. Nesselrod and Jay M. Garner, Evanston, McDonough County Medical Society in Bushnell, March 24, on Ano-Tectal Disease, and Proctoscopic Colored Movies.

Theodore R. Van Dellen, Chicago, Whiteside-Lee Counties Medical Society in Rock Falls, April 6, on Coronary Disease.

ATTRIBUTE RELIEF FROM SHAKING PALSY TO PSYCHOTHERAPY

Panparnit, a relatively new synthetic drug, has not fulfilled expectations as a treatment for shaking palsy, according to a group of doctors from Columbia University College of Physicians and Surgeons.

The drug, known as panparnit until recently, showed promise in early tests of becoming a superior treatment for the disease.

Favorable results in treating shaking palsy victims with panparnit seem to be produced to some extent by psychotherapy administered concurrently with the drug, the doctors say in the current Dec. 24 Journal of the American Medical Association.

The doctors — Daniel Sciarra, Sidney Carter and H. Houston Merritt — treated 43 patients for various neurologic conditions with panparnit.

Twenty-eight of the 43 had shaking palsy. In only one of the 28 could improvement be attributed to panparnit, the doctors say.

Of the entire group of 43, three showed some improvement. Thirty-seven had dizziness, nausea, vomiting, drowsiness, weakness, or other undesirable symptoms caused by the drug.

"It may be concluded that panparnit is not more effective than drugs previously in general use," the doctors point out.

"Favorable results obtained by other investigators probably were influenced by the intrinsic fluctuations of the patient with chronic disease and by the many psychotherapeutic factors that are inherent in the clinical investigation of any drug."